

SONY®

SDI OUTPUT BOARD

BKP-7311

MAINTENANCE MANUAL
1st Edition (Revised 2)

⚠️ 警告

このマニュアルは、サービス専用です。
お客様が、このマニュアルに記載された設置や保守、点検、修理などを行うと感電や火災、
人身事故につながることがあります。
危険をさけるため、サービストレーニングを受けた技術者のみご使用ください。

⚠️ WARNING

This manual is intended for qualified service personnel only.
To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that
contained in the operating instructions unless you are qualified to do so. Refer all servicing to
qualified service personnel.

⚠️ WARNUNG

Die Anleitung ist nur für qualifiziertes Fachpersonal bestimmt.
Alle Wartungsarbeiten dürfen nur von qualifiziertem Fachpersonal ausgeführt werden. Um die
Gefahr eines elektrischen Schlages, Feuergefahr und Verletzungen zu vermeiden, sind bei
Wartungsarbeiten strikt die Angaben in der Anleitung zu befolgen. Andere als die angegebenen
Wartungsarbeiten dürfen nur von Personen ausgeführt werden, die eine spezielle Befähigung
dazu besitzen.

⚠️ AVERTISSEMENT

Ce manual est destiné uniquement aux personnes compétentes en charge de l'entretien. Afin
de réduire les risques de décharge électrique, d'incendie ou de blessure n'effectuer que les
réparations indiquées dans le mode d'emploi à moins d'être qualifié pour en effectuer d'autres.
Pour toute réparation faire appel à une personne compétente uniquement.

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Section 1

Installation

1-1. General

BKP-7311 is the board kit that has a function of color corrector and D1 format serial digital output. When this board kit is installed into CCU-700A/CCU-700AP Camera Control Unit, BVP-700/700P system can operate in D1 format serial digital system.

1-2. Function of Switches on AD Board

- S1601(TEST ON/OFF)
Turn on when performing the adjustment of analog signal system for AD-117 board.
(Refer to Section 2 “Alignment”.)
Factory-setting : OFF
 - S1602(CHU RET1/2 LINE)
Selects an output signal to be output to viewfinder, when selecting the RET1/RET2 switch of BVP.
The output signal is as follows.

S1602/AD-117	RET SW/BVP	Output signal for VF
RET1/RET2	RET1 RET2	RET1 RET2
RET3/RET4	RET1 RET2	RET3 RET4

Factory-setting : RET1/RET2

- S1603(Digital RET BW/COLOR)
Selects B&W or COLOR as the DIGITAL RET signal when DA-101 board(BKP-7312) is installed in CCU.
Factory-setting : COLOR
 - CN2541(SDI ON/OFF)
Turn off when performing the adjustment of SDI Free-Run frequency.
(Refer to Section 2-5-1 “SDI Free-Run Frequency adjustment”.)
Factory-setting : ON
 - S2961(SDI TEST ON/OFF)
Turn on to output a test signal which is selected by S2962 at SERIAL OUTPUT connector of CCU.

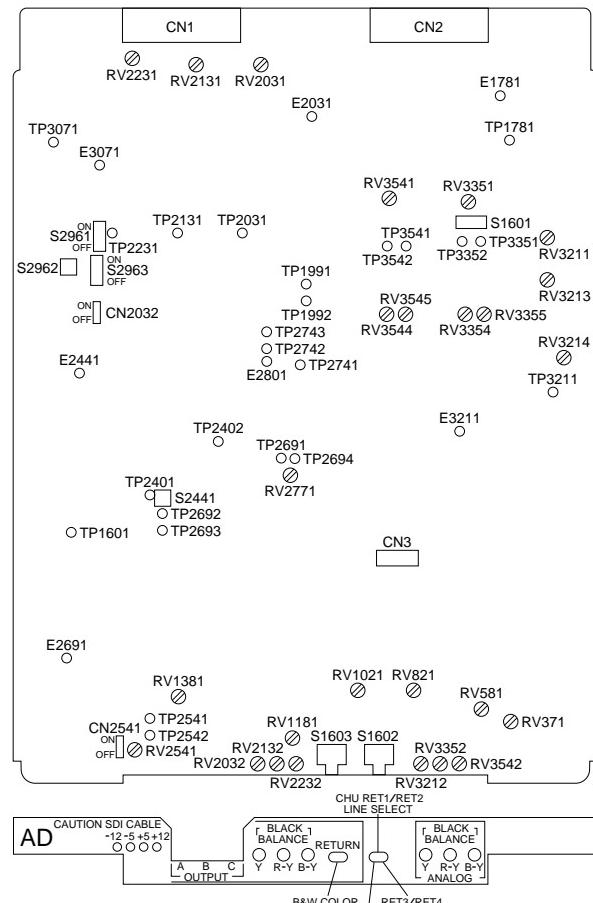
- S2963(REMOTE ON/OFF)
Selects an output signal at SERIAL OUTPUT connector of CCU.
ON : Outputs test signal which is selected by S2962
OFF : Outputs COLOR-BAR signal from VA-156
which is analog-to-digital converted in AD board.

- S2962(D1 BAR MODE)
Selects the TEST signal to be output at SERIAL OUTPUT connector of CCU

S2962			TEST SIGNAL
-1	-2	-3	
OFF	OFF	ON	75% COLOR BAR
ON	OFF	ON	100% COLOR BAR
OFF	ON	ON	BLACK BURST
ON	ON	ON	MULTI BURST
-	-	OFF	WORST PATTERN

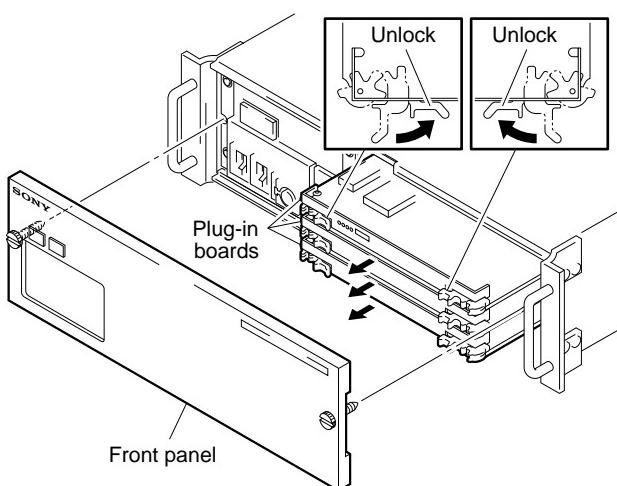
Note

S2962-4 is not used.

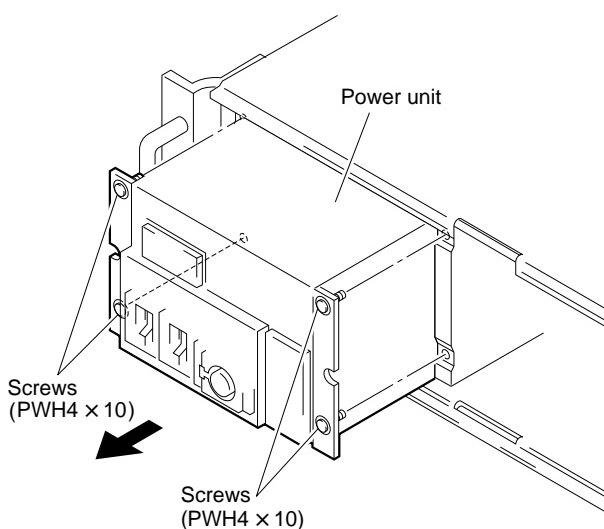


1-3. Installation of BKP-7311

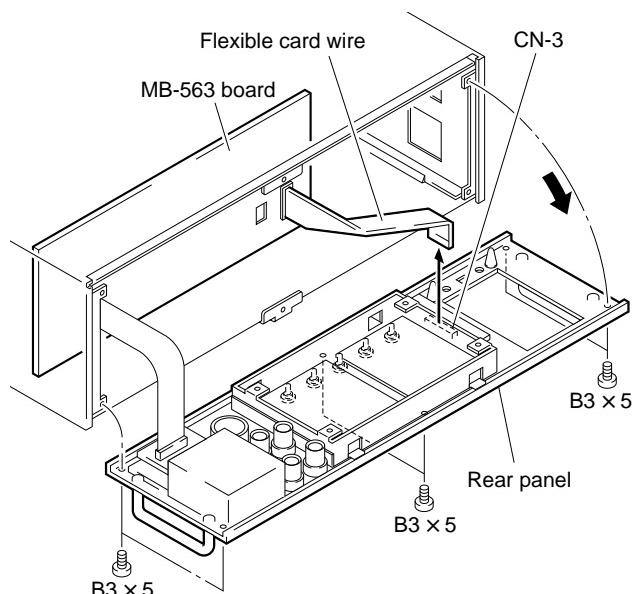
1. Disconnect the power cord from the rear panel of CCU-700A. Loosen the two screws(M4 × 20) and remove the front panel.
2. Push and turn the eject levers to unlock and pull out all the plug-in boards from the unit.



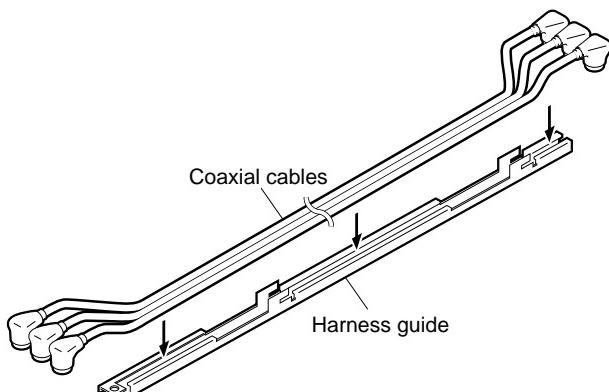
3. Loosen the four screws(PWH4 × 10) fixing the power unit and remove the power unit while pushing the power unit forward at the fan in the rear of the unit.



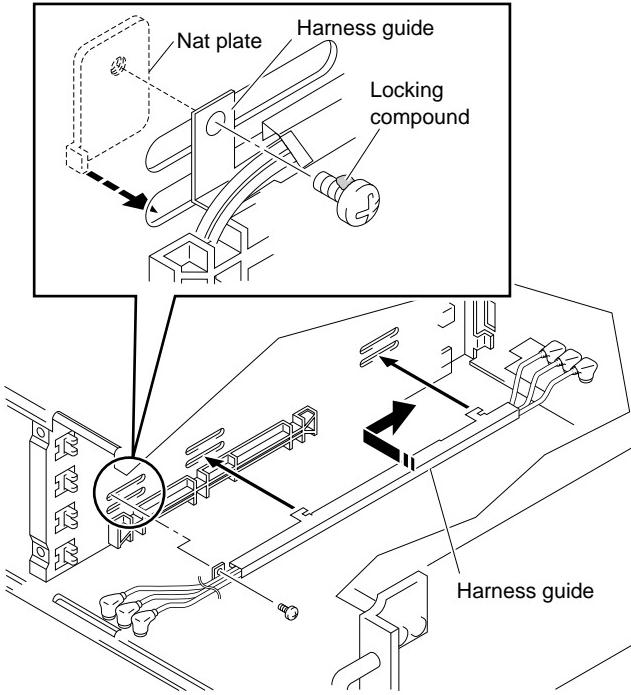
4. Remove the six screws(B3 × 5) and open the rear panel. Disconnect CN3 connected to the rear panel.



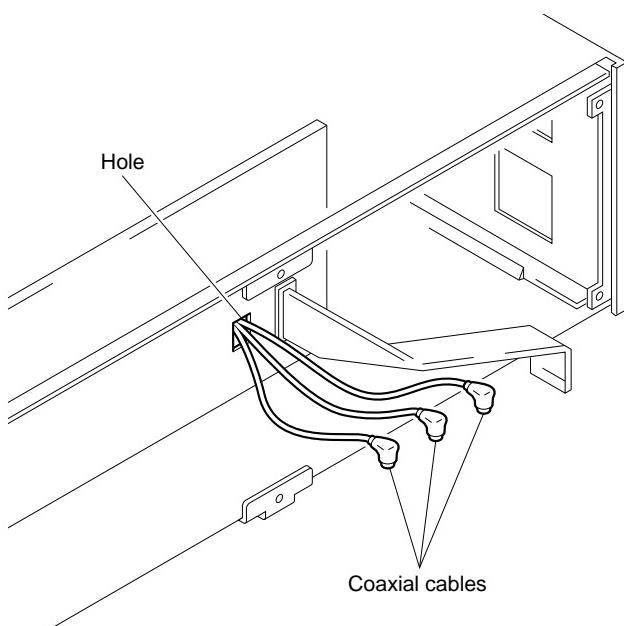
5. Install the three coaxial cables into the supplied harness guide.



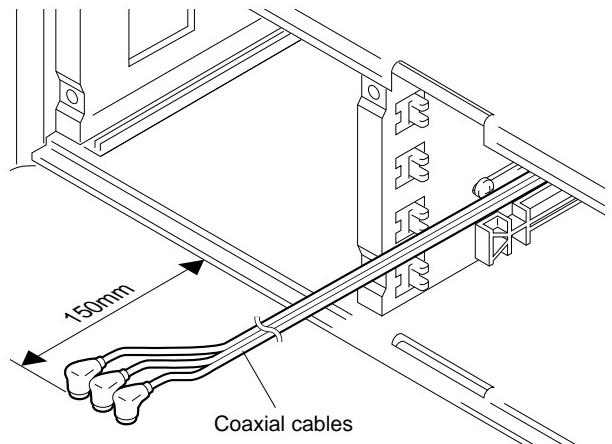
6. Hook the harness guide onto the rail plate and push it in the direction of the arrow.
7. Apply locking compound to the thread part, then tighten screw to install the supplied nut plate.



8. Pass the three coaxial cables through the hole on the MB-563.



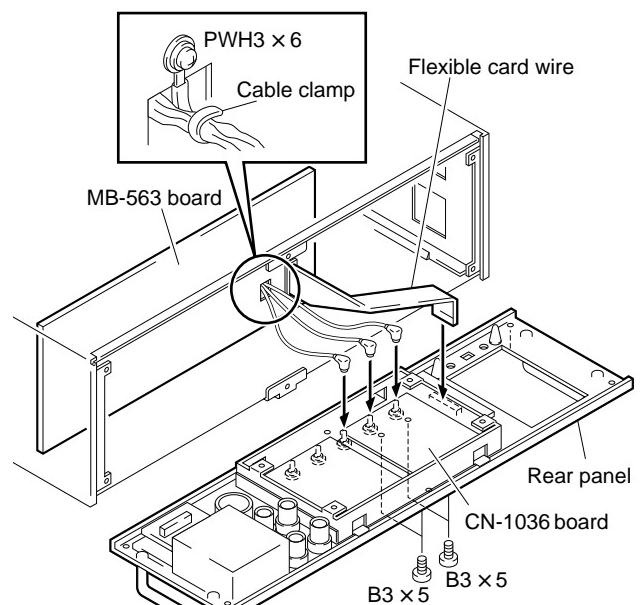
9. Extract the three coaxial cables from the front side about 150 mm shown in the figure.



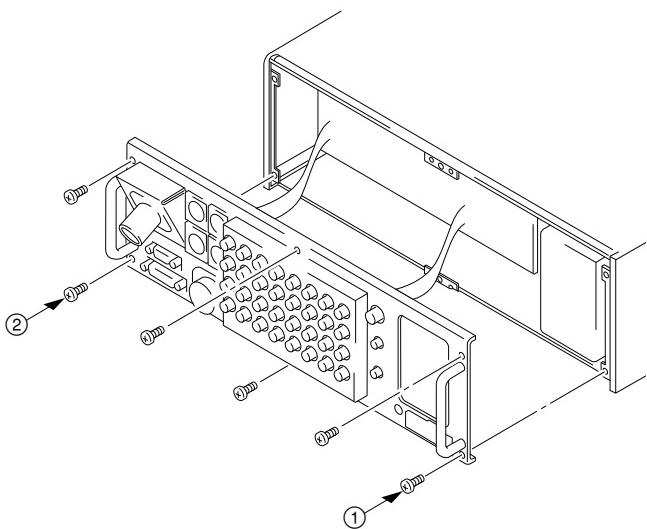
10. Hold the coaxial cables using a supplied harness clamp.
11. Connect the three coaxial cables to the rear panel. Connect the CN3 removed in step 4 to the rear panel.

Note

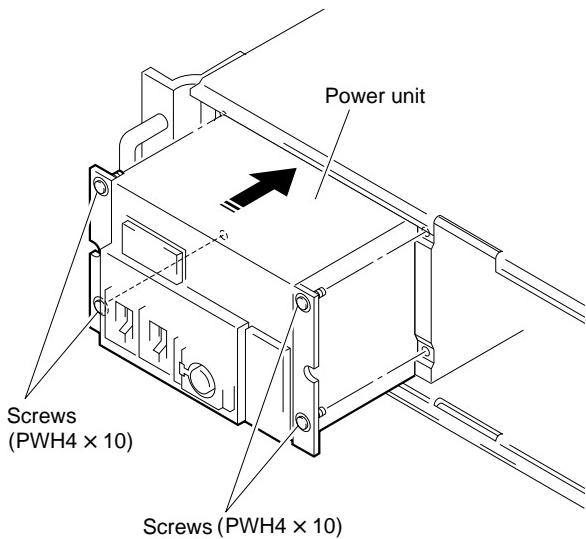
If it is difficult to connect the coaxial cables, remove the CN-1036 on the rear panel, and then connect them. When installing the board, apply locking compound to the four screws.



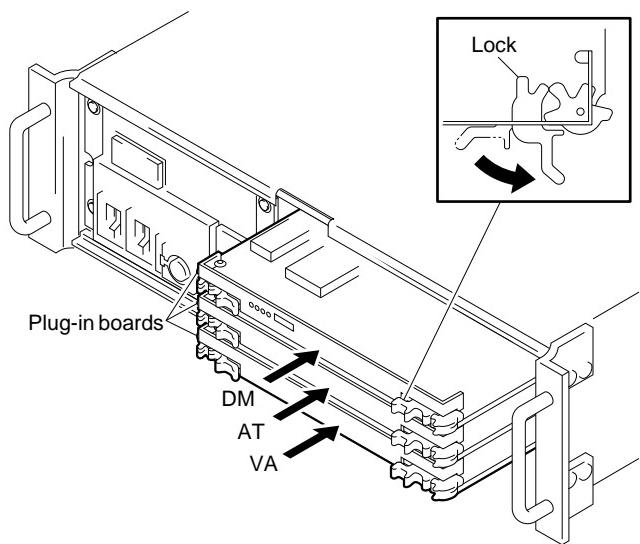
12. Tighten screws ① and ② shown in the figure, then tighten the remaining four screws, and install the rear panel.



13. Install the power unit in the unit with four screws.



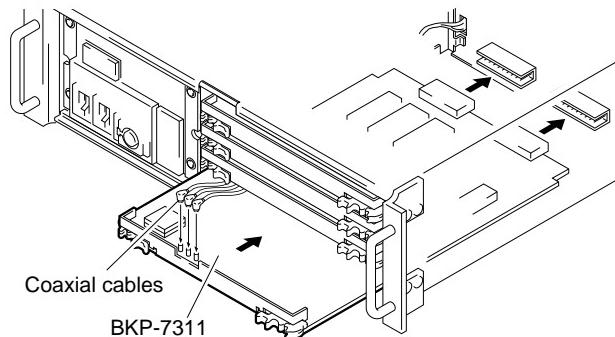
14. Insert the plug-in boards removed in step 2 in the unit in the reverse procedures of removal.



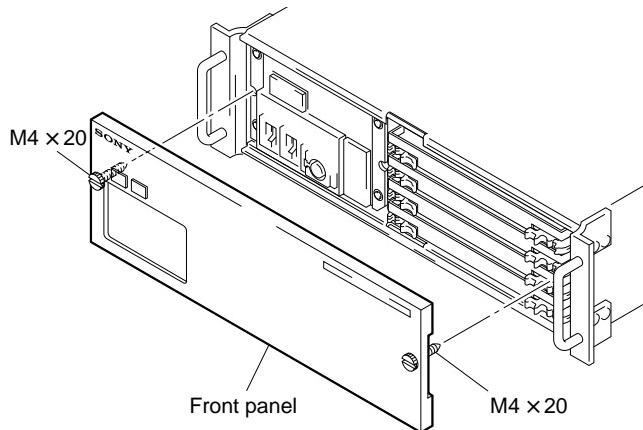
15. Insert the BKP-7311 in the unit, and connect the three coaxial cables to the BKP-7311.

Note

The same signal is output at connectors CN2571, CN2572 and CN2581. Coaxial cables can be connected to every connector.



16. Tighten the two screws(M4 × 20) on the front panel and install the front panel.



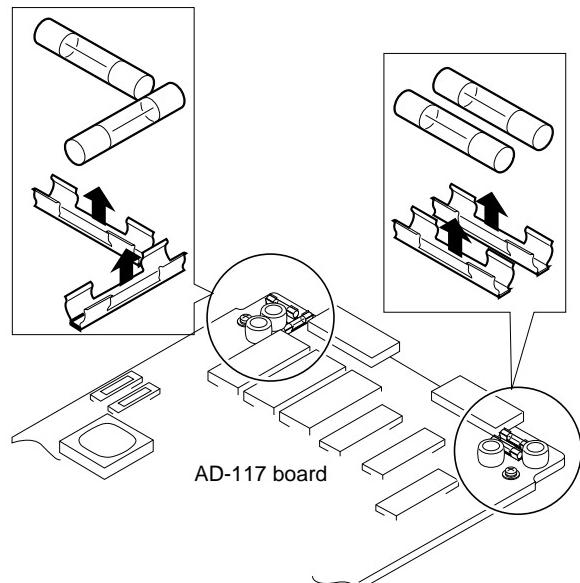
1-4. Fuse Replacement on AD-117 Board

The AD-117 board has four fuses which shut off the power. If any fault occurs or the rush current flows in the unit, the fuse will be burnt out.

When replacing the fuse, remedy the cause of trouble.

Note

- The fuse should be replaced after disconnecting the AD-117 from the unit.
- The fuse should be replaced with specified parts described on Section 3 Spare Parts.



1-5. System Adjustment

Perform the adjustment of VA-156A board in CCU-700A as follows.

Turn on the power of CCU-700A, and then adjust the VA-156A board in CCU-700A making sure that the signal of camera should be stable.

Extend VA-156A board with BKP-7900 Extension Board.

Adjustment Procedure

Adjust the camera H phase as shown below.

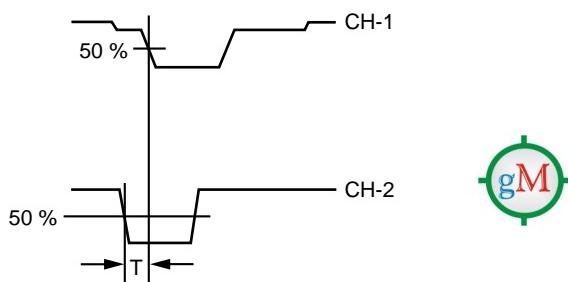
Equipment : Oscilloscope (CHOP mode)

To be extended : VA-156A board

Test point : CH1 pin A36/extension board
CH2 pin C18/extension board

Adjustment point : **•**RV1892/VA-156A board

Specifications : $T = 0.35 \pm 0.10 \mu\text{s}$



Note

For PAL model, please read board and model names as follows.

VA-156A → VA-156P

CCU-700A → CCU-700AP

Section 2

Electrical Alignment

2-1. Preparation

2-1-1. Equipment Required

Measuring Equipments

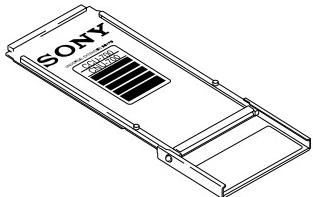
- Oscilloscope (Band width: more than 300 MHz)
Tektronix 2465 or equivalent
- Video signal generator
Tektronix 1410 or equivalent
- Digital voltmeter
- Digital waveform monitor
Tektronix 601i or equivalent
- Frequency counter

Peripheral Equipments

- Video Camera Sony BVP-700/700P or BVP-550 + CA-550
- Camera Control Unit CCU-700A/700AP
- Master Setup Unit MSU-700
(These equipments should be correctly adjusted.)

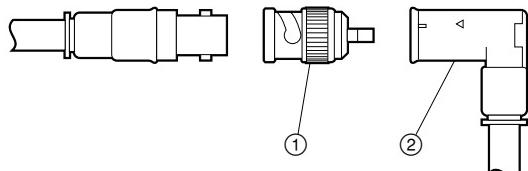
2-1-2. Tools

Extension Board BKP-7900



Coaxial connector converter

- ① Sony Part Number : 1-774-157-11
② Sony Part Number : 1-751-813-11



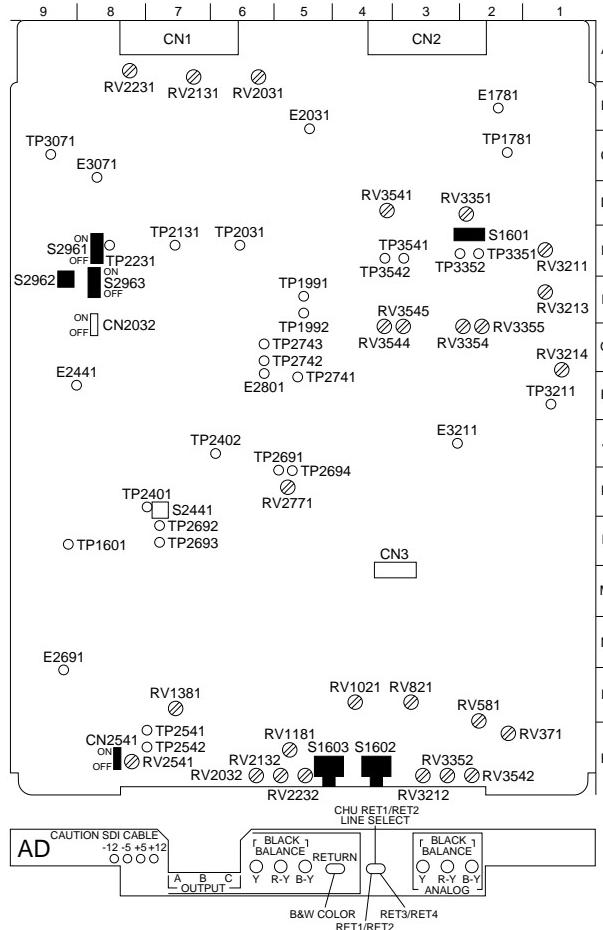
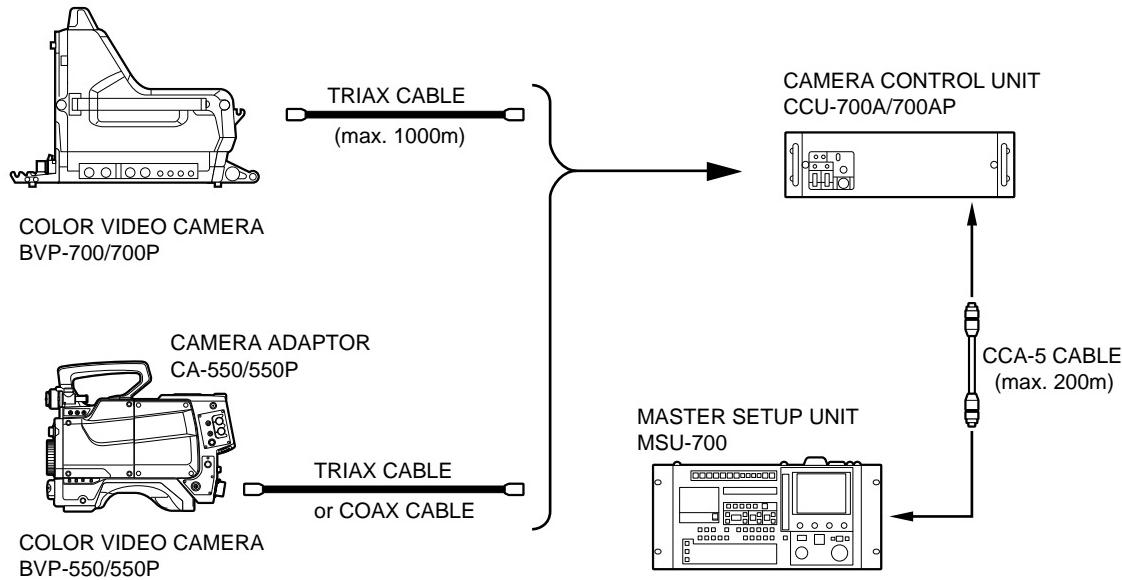
2-1-3. Note on Adjustment

Note

- Extend following boards with extension board.
AD-117/VA-156A board → BKP-7900 extension board
- When installing or pulling out the board, turn off the power of CCU-700A.
- The 20 MHz BW LIMIT switch on the osilloscope is set to ON without notice.

2-1-4. Connection

Note Make sure that the adjustment of Video Camera BVP-700/BVP-550 should be completed.



2-1-5. Initial Setting

1. Initial setting of each switch

CCU-700A

Following switches should be reset after carrying out the adjustment and so on.

[VA-156A board]

S1 (Y SEL CAM/AUX)	Marked side (*1)
S125 (R-Y SEL CAM/AUX)	Marked side (*1)
S126 (TEST ON/OFF)	“OFF”
S221 (B-Y SEL CAM/AUX)	Marked side (*1)
S1962 (REMOTE REM/LOCAL)	“LOCAL” (*2)
S2032 (CB SELECT)	“EIAJ”

[DM-94 board]

S1 (MODE AUTO/MANU)	“AUTO”
S3 (Y 2nd AGC)	“ON”
S4 (C 2nd AGC)	“ON”

[AT-88 board]

S1006 (REMOTE MODE 1 CMD/ISR)	“CMD”
S1007 (REMOTE MODE 2 CMD/ISR)	“CMD”

BKP-7311

[AD-117 board]

S1601 (TEST ON/OFF) [E-2]	“OFF”
S1602 (RET SELECT) [R-4]	“RET1/RET2”
S1603 (RET B/W COLOR) [R-5]	“COLOR”
CN2541 (SDI ON/OFF) [R-8]	“ON”
S2961 (SDI TEST) [E-8]	“OFF”
S2963 (REMOTE) [F-8]	“ON”
S2962 (D1 BAR-MODE) [F-9]	
1	“OFF”
2	“OFF”
3	“ON”
4	“OFF”

(*1) : Refer to “Section 1-4. Function of Internal Switch” of CCU-700A/CCU-700AP Maintenance Manual.

(*2) : S1962 is set to “REMOTE” at the factory.

MSU-700

• Power and signal switch block	
ALL button	“OFF(lamp goes off)”
CAM PW button	“ON(light up)”
TEST 1 button	“OFF(lamp goes off)”
TEST 2 button	“OFF(lamp goes off)”
BARS button	“OFF(lamp goes off)”
CLOSE button	“OFF(lamp goes off)”
• Camera head/CCU Circuit ON/OFF block	
DETAIL OFF button	“OFF(light up)”
KNEE OFF button	“OFF(light up)”
AUTO KNEE button	“OFF(lamp goes off)”
MATRIX OFF button	“OFF(light up)”
• AUTO SETUP block	
LEVEL button	“OFF(lamp goes off)”
WHITE button	“OFF(lamp goes off)”
BLACK button	“OFF(lamp goes off)”
• OTHERS	
GAMMA OFF button	“ON(lamp goes off)”
MASTER GAIN select button	“0”
COLOR CORRECT button	“OFF(lamp goes off)”

2. Presetting of compensation signal

- Preset (center value) all compensation data output of the microprocessor before performing the adjustments.
If not, the adjustments cannot be performed.
Before performing the gain adjustment of S1 and Y3 of EDTV standard, compensation data should be presetted.
- How to preset the compensation data.
 - Turn off the power of CCU.
 - S1002-8 (CONTROL CLEAR) /AT-88 board→“ON”
 - Turn on the power of CCU.

Note

- Set the CCU number to 96 or less using S1001 on AT-88 board before performing the preset of compensation data.
When S1002-8 is set to “ON” except above setting, factory-setting data is deleted, and cannot recover the factory shipping state.
- When finishing the overall adjustment, set S1002-8 (CONTROL CLEAR) /AT-88 board to “OFF”.

2-2. Y Signal System Adjustment

Preparation :

- Disconnect the following connectors connected to the AD-117 board.
- CN2571, CN2572, CN2581
- Extend AD-117 board with BKP-7900 board.

2-2-1. Y Black Offset Adjustment

Equipment : Oscilloscope

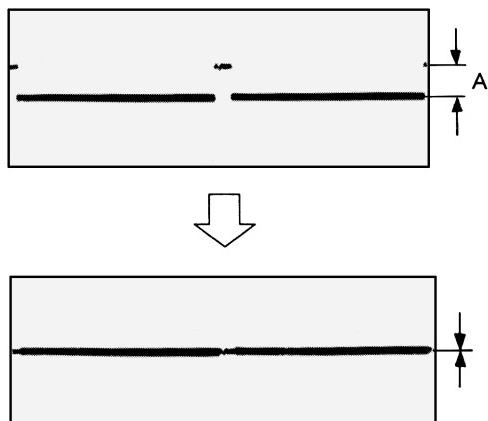
Board : AD-117

Preparation :

MSU-700 Setting

- CLOSE button → “ON”
 - MASTER BLACK control knob → “-99”
- Test point : A70 (GND:B70)/Extension board extending AD-117
- Adjusting point : \bullet RV3212 [R-3]/AD-117
- Specification : $A = 0 \pm 1$ IRE (for NTSC)
 $A = 0 \pm 5$ mV (for PAL)

Adjustment Procedure



Note

After adjustment, set as follows.

MSU-700 Setting

- MASTER BLACK control knob → “0”

2-2-2. Y DL Level Adjustment

Equipment : Oscilloscope

Board : AD-117

Preparation :

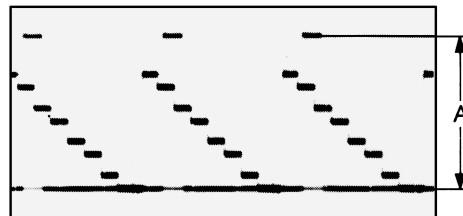
- S1601 (TEST ON/OFF) [E-2]/AD-117 → “ON”
- BARS button/MSU-700 → “ON”

Adjusting point : \bullet RV3211 [E-1]/AD-117

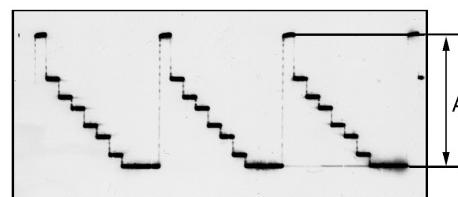
Adjustment Procedure

- Measure the peak signal level “A” at A73 (GND:B73)/Extension board, and adjust \bullet RV3211 [E-1]/AD-117 so that the level at A70 (GND:B70)/Extension board makes the same level “A”.

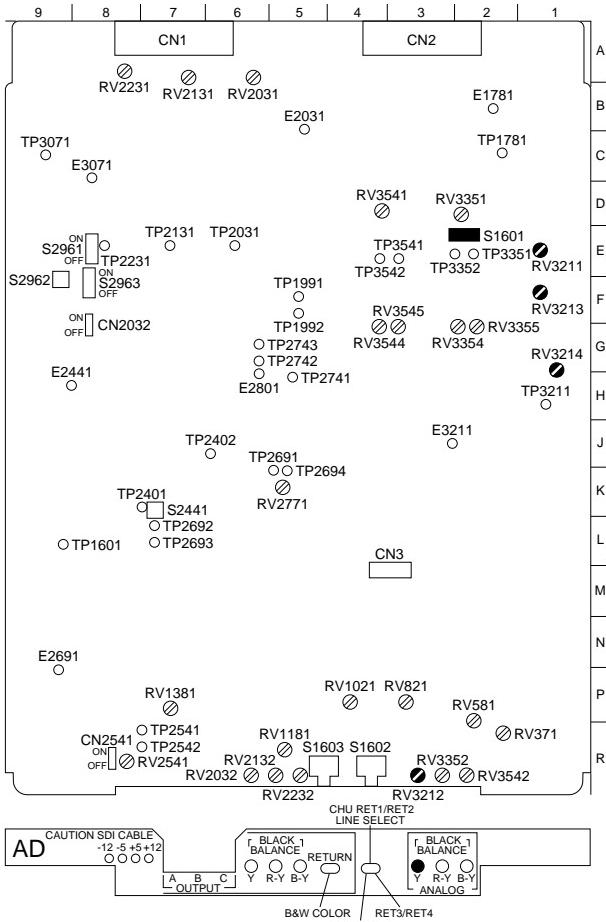
(for NTSC)



(for PAL)



- S1601 (TEST ON/OFF) [E-2]/AD-117 → “OFF”

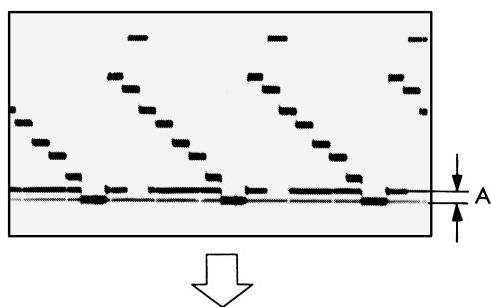


2-2-3. Y (CC) Black Adjustment

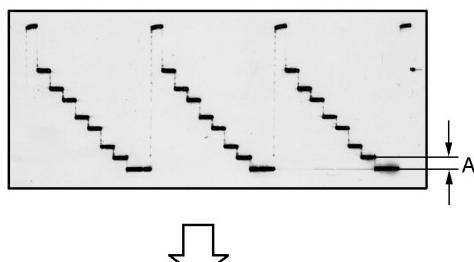
Equipment : Oscilloscope
 Board : AD-117
 Preparation :
 • S1601 (TEST ON/OFF) [E-2]/AD-117 →“ON”
 • BARS button/MSU-700 →“ON”
 Test point : C71 (GND:D71)/Extension board
 Adjusting point :  RV3214 [G-1]/YC-58
 Specification : A = 0 ± 10 mV

Adjustment Procedure

(for NTSC)



(for PAL)



- S1601 (TEST ON/OFF) [E-2]/AD-117 →“OFF”

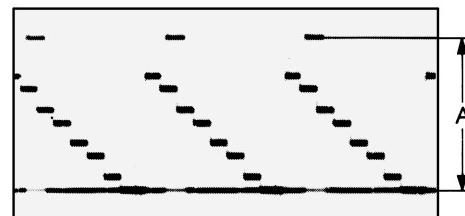
2-2-4. Y (CC) Level Adjustment

Equipment : Oscilloscope
 Board : AD-117
 Preparation :
 • S1601 (TEST ON/OFF) [E-2]/AD-117 →“ON”
 • BARS button/MSU-700 →“ON”
 Adjusting point :  RV3213 [F-1]/AD-117

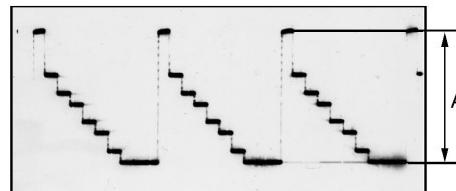
Adjustment Procedure

1. Measure the peak signal level “A” at A73 (GND:B73)/Extension board, and adjust  RV3213 [F-1]/AD-117 board so that the level at C71 (GND:D71)/Extension board makes the same level “A”.

(for NTSC)



(for PAL)



2. S1601 (TEST ON/OFF) [E-2]/AD-117 →“OFF”

2-3. R-Y Signal System Adjustment

Preparation :

- Disconnect the following connectors connected to the AD-117 board.
- CN2571, CN2572, CN2581
- Extend AD-117 board with BKP-7900 board.

2-3-1. R-Y Black Offset Adjustment

Equipment : Oscilloscope

Board : AD-117

Preparation :

MSU-700 Setting

- CLOSE button → “ON”

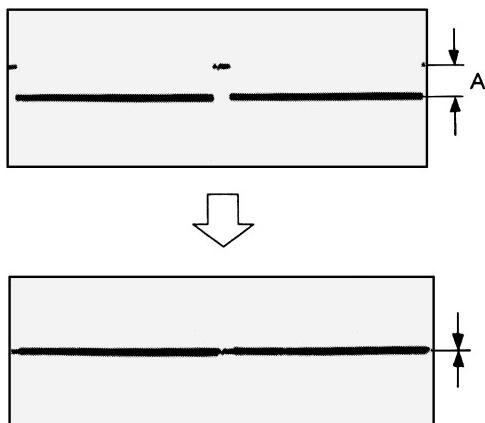
- MASTER BLACK control knob → “-99”

Test point : C70 (CND : D70)/Extension board
extending AD-117

Adjusting point : \bullet RV3352 [R-3]/AD-117

Specification : A = 0 ± 1 IRE (for NTSC)
A = 0 ± 5 mV (for PAL)

Adjustment Procedure



Note

After adjustment, set as follows.

MSU-700 Setting

- MASTER BLACK control knob → “0”

2-3-2. R-Y DL Level Adjustment

Equipment : Oscilloscope

Board : AD-117

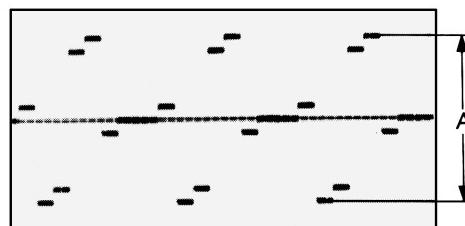
Preparation :

- S1601 (TEST ON/OFF) [E-2]/AD-117 → “ON”
- BARS button/MSU-700 → “ON”

Adjusting point : \bullet RV3351 [D-2]/AD-117

Adjustment Procedure

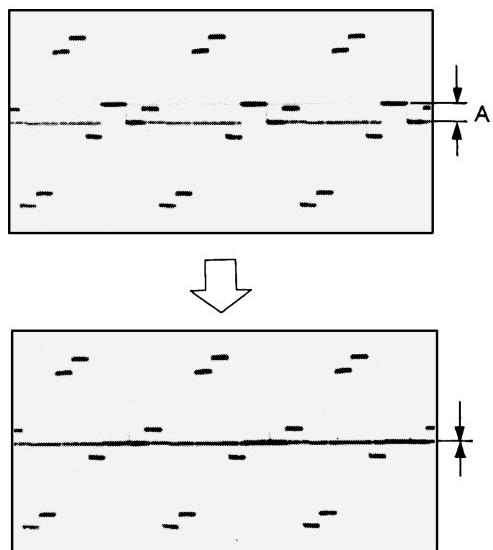
1. Measure the peak signal level “A” at C74 (GND:D74)/Extension board, and adjust \bullet RV3351 [D-2]/AD-117 board so that the level at C70 (GND:D70)/Extension board makes the same level “A”.



2. S1601 (TEST ON/OFF) [E-2]/AD-117 → “OFF”

2-3-3. R-Y (CC) Black Adjustment

Equipment : Oscilloscope
 Board : AD-117
 Preparation :
 • S1601 (TEST ON/OFF) [E-2]/AD-117 → “ON”
 • BARS button/MSU-700 → “ON”
 Test point : A72 (GND:B72)/Extension board
 Adjusting point :  RV3354 [F-2]/AD-117
 Specification : A = 0 ± 10 mV



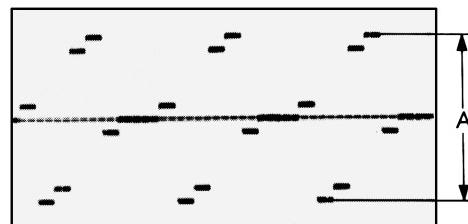
- S1601 (TEST ON/OFF) [E-2]/AD-117 → “OFF”

2-3-4. R-Y (CC) Level Adjustment

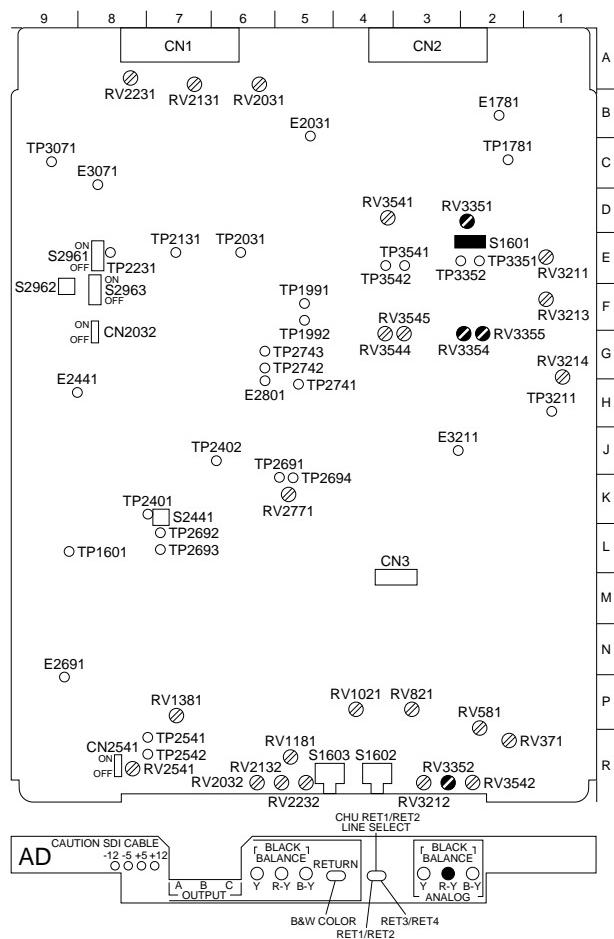
Equipment : Oscilloscope
 Board : AD-117
 Preparation :
 • S1601 (TEST ON/OFF) [E-2]/AD-117 → “ON”
 • BARS button/MSU-700 → “ON”
 Adjusting point :  RV3355 [F-2]/AD-117

Adjustment Procedure

1. Measure the peak signal level “A” at C74 (GND:D74)/Extension board, and adjust  RV3355 [F-2]/AD-117 board so that the level at A72 (GND:B72)/Extension board makes the same level “A”.



2. S1601 (TEST ON/OFF) [E-2]/AD-117 → “OFF”



2-4. B-Y Signal System Adjustment

Preparation :

- Disconnect the following connectors connected to the AD-117 board.
CN2571, CN2572, CN2581
 - Extend AD-117 board with BKP-7900 board.

2-4-1. B-Y Black Offset Adjustment

Equipment : Oscilloscope

Board : AD-117

Preparation :

MSU-700 Setting

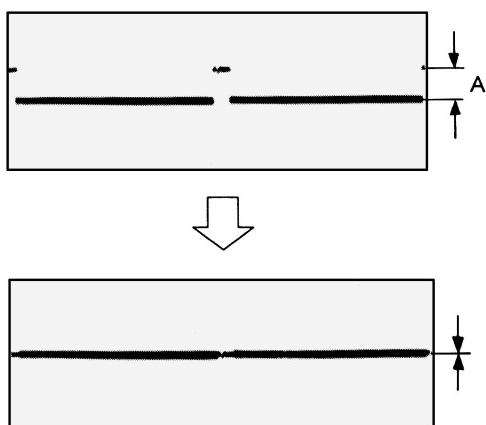
- CLOSE button → “ON”
 - MASTER BLACK control knob → “-99”

Test point : A77 (CND : B77)/Extension board
extending AD-117

Adjusting point : \bullet RV3542 [R-3]/AD-117

Specification : A = 0 ± 1 IRE (for NTSC)
A = 0 ± 5 mV (for PAL)

Adjustment Procedure



Note

After adjustment, set as follows.

MSU-700 Setting

- MASTER BLACK control knob → “0”

2-4-2. B-Y DL Level Adjustment

Equipment : Oscilloscope

Board : AD-117

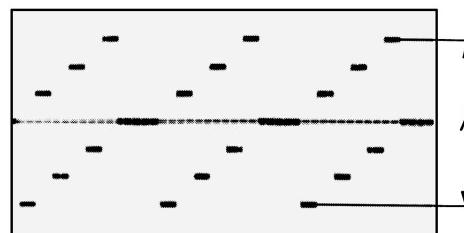
Preparation :

- S1601 (TEST ON/OFF) [E-2]/AD-117 →“ON”
 - BARS button/MSU-700 →“ON”

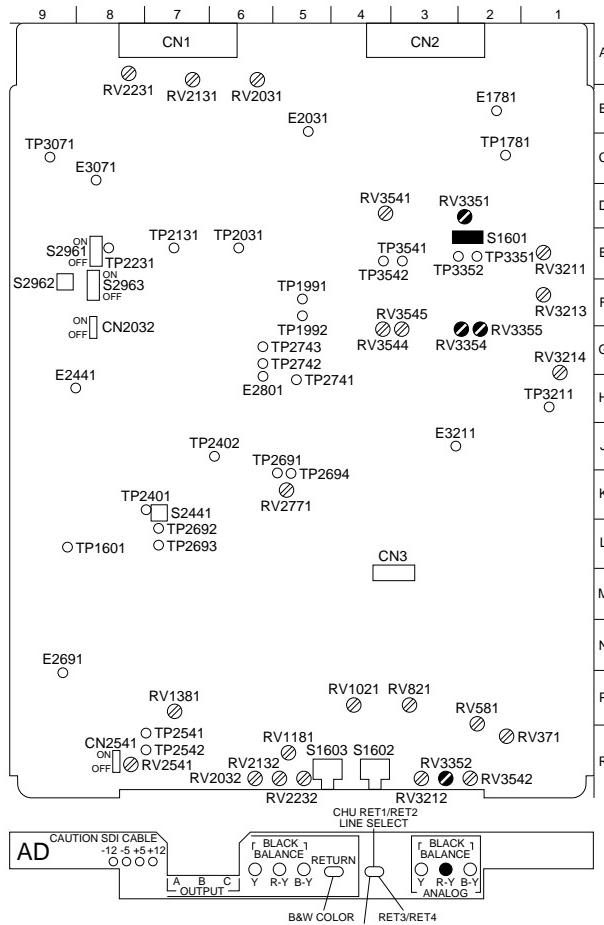
Adjusting point : ● RV3541 [D-4]/AD-117

Adjustment Procedure

1. Measure the peak signal level “A” at C77 (GND:D77)/ Extension board, and adjust  RV3541 [D-4]/AD-117 board so that the level at A77 (GND:B77)/Extension board makes the same level “A”.

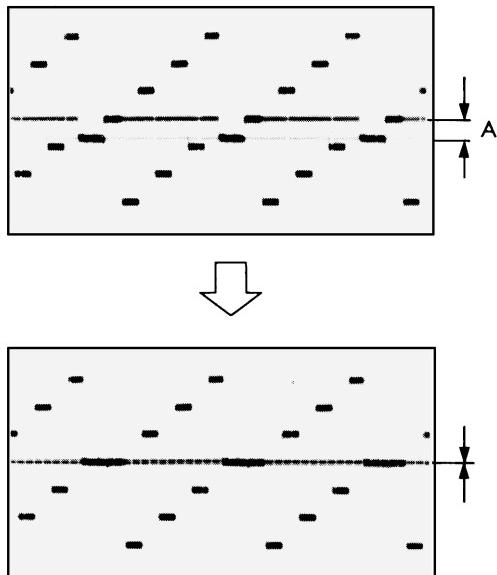


2. S1601 (TEST ON/OFF) [E-2]/AD-117 → “OFF”



2-4-3. B-Y (CC) Black Adjustment

Equipment : Oscilloscope
 Board : AD-117
 Preparation :
 • S1601 (TEST ON/OFF) [E-2]/AD-117 →“ON”
 • BARS button/MSU-700 →“ON”
 Test point : C76 (GND:D76)/Extension board
 Adjusting point :  RV3544 [G-4]/AD-117
 Specification : A = 0 ± 10 mV



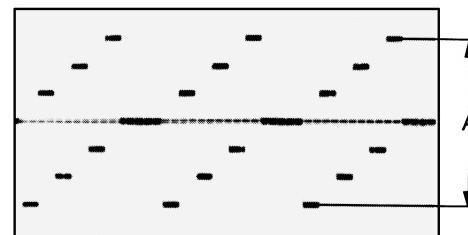
- S1601 (TEST ON/OFF) [E-2]/AD-117 →“OFF”

2-4-4. B-Y (CC) Level Adjustment

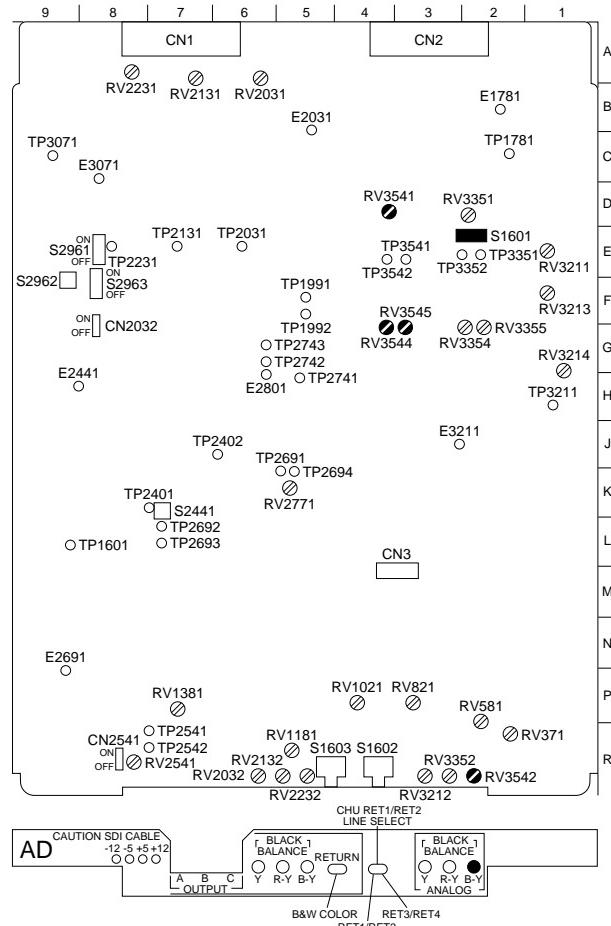
Equipment : Oscilloscope
 Board : AD-117
 Preparation :
 • S1601 (TEST ON/OFF) [E-2]/AD-117 →“ON”
 • BARS button/MSU-700 →“ON”
 Adjusting point :  RV3545 [G-3]/AD-117

Adjustment Procedure

1. Measure the peak signal level “A” at C77 (GND:D77)/ Extension board, and adjust  RVRV3545 [G-3]/AD-117 board so that the level at C76 (GND:D76)/ Extension board makes the same level “A”.



2. S1601 (TEST ON/OFF) [E-2]/AD-117 →“OFF”



2-5. SDI Output System Adjustment

Preparations :

- Disconnect the following connectors connected to the AD-117 board.
- CN2571, CN2572, CN2581
- Extend AD-117 board with BKP-7900 board.

2-5-1. SDI Free-Run Frequency Adjustment

Note

- Warm up the CCU for more than 10 minutes before performing this adjustment.

Equipment : Oscilloscope, Frequency counter
Board : AD-117

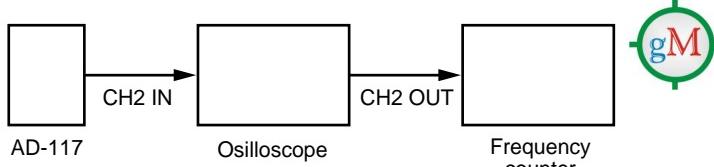
Preparation:

- CN2541 [R-8]/AD-117 → OFF

Test point : TP2542 [R-8] (GND:E2691 [N-9])/
AD-117

Adjustment point : ORV2541 [R-8]/AD-117

Specifications : 27.00 ± 0.05 MHz



Note

After adjustment is completed, set the switch as follows.

- CN2541 [R-8]/AD-117 → ON

2-5-2. SDI Video Phase Adjustment

Equipment : Digital waveform monitor

Board : AD-117

Preparations :

- Connect the digital waveform monitor to the CN2571 [R-7]/AD-117 via the coaxial connector converter.
- BARS button/MSU-700 → “ON”
- S2963 [F-8]/AD-117 → “OFF”

Test point : CN2571 [R-7]/AD-117

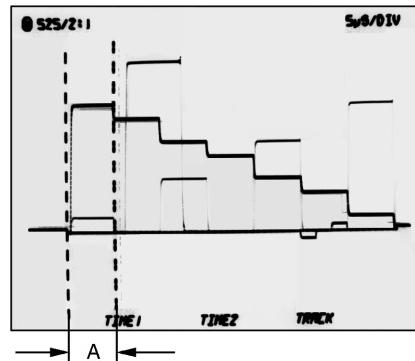
Adjustment point : ORV2771 [K-5]/AD-117

Adjustment procedures

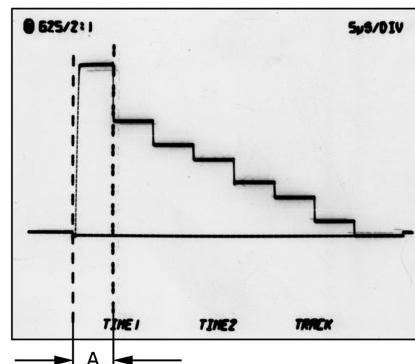
1. Turn ORV2032 [R-6]/AD-117 fully counterclockwise \odot .
2. Adjust the level of portion A with ORV2771 [K-5]/AD-117 as follows.

Specifications : A = 7.7 ± 0.1 μ s (for NTSC)
A = 6.5 ± 0.1 μ s (for PAL)

(for NTSC)



(for PAL)



Note

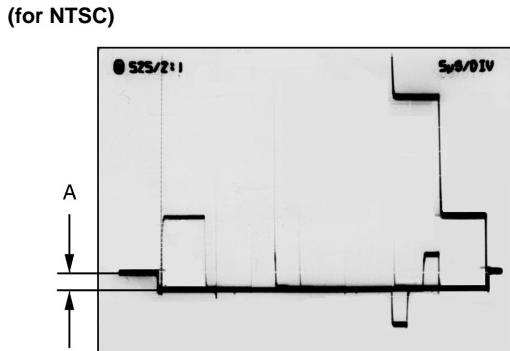
After adjustment is completed, be sure to perform “2-5-3. SDI Y Black Adjustment”.

2-5-3. SDI Y Black Adjustment

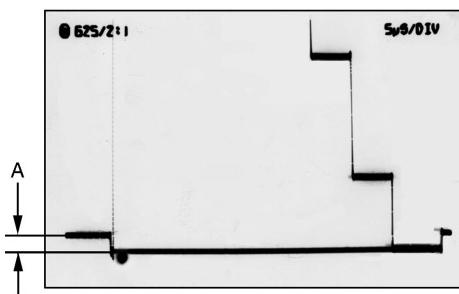
Equipment : Digital waveform monitor
Board : AD-117
Preparations :

- Connect the digital waveform monitor to the CN2571 [R-7]/AD-117 via the coaxial connector converter.
- BARS button/MSU-700 →“ON”
- S2963 [F-8]/AD-117 →“OFF”

Test point : CN2571 [R-7]/AD-117
Adjustment point : ORV2032 [R-6]/AD-117
Specifications : $A = 0 \pm 5 \text{ mV}$



(for PAL)



Note

After adjustment is completed, set the switch as follows.

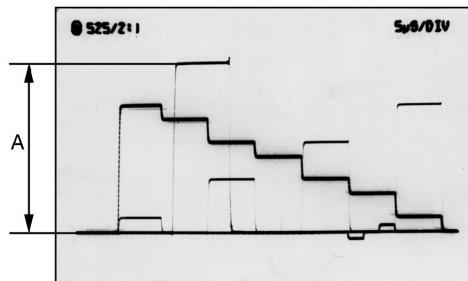
- S2963 [F-8]/AD-117→ON

2-5-4. SDI Y Level Adjustment

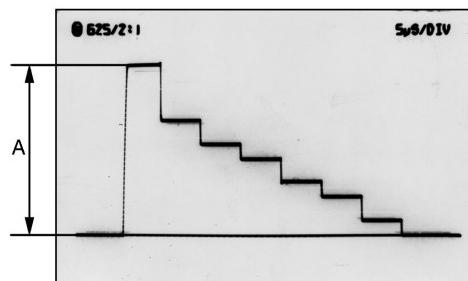
Equipment : Digital waveform monitor
Board : AD-117
Preparations :

- Connect the digital waveform monitor to the CN2571 [R-7]/AD-117 via the coaxial connector converter.
- BARS button/MSU-700 →“ON”
- S2963 [F-8]/AD-117 →“OFF”

Test point : CN2571 [R-7]/AD-117
Adjustment point : ORV2031 [B-6]/AD-117
Specifications : $A = 700 \pm 5 \text{ mV}$



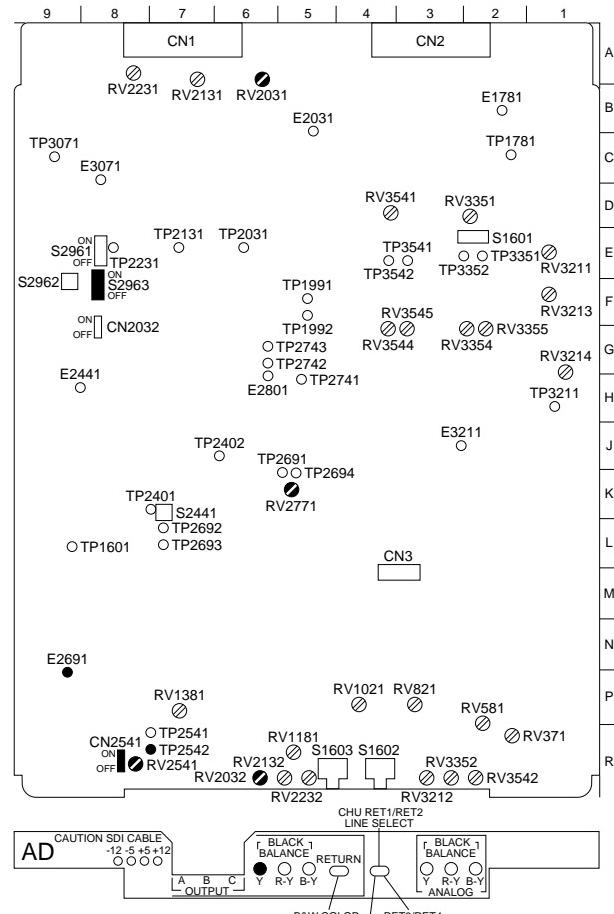
(for PAL)



Note

After adjustment is completed, set the switch as follows.

- S2963 [F-8]/AD-117→ON



2-5-5. SDI R-Y/B-Y Black Adjustment

Equipment : Digital waveform monitor (Vector mode)

Board : AD-117

Preparations :

- Connect the digital waveform monitor to the CN2571 [R-7]/AD-117 via the coaxial connector converter.

• BARS button/MSU-700 →“ON”

• S2963 [F-8]/AD-117 →“OFF”

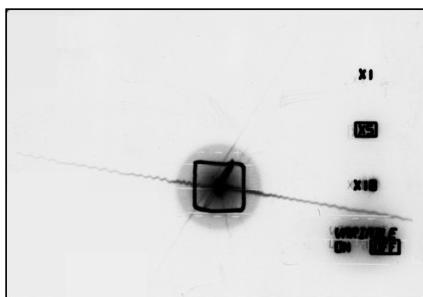
Test point : CN2571 [R-7]/AD-117

Adjustment point : **ORV2132 [R-5]/AD-117**

ORV2232 [R-5]/AD-117

Adjustment procedures

1. Put the digital waveform monitor into the vector mode.
2. Center the beam spot on the vectorscope by turning **ORV2132 [R-5]/AD-117** and **ORV2232 [R-5]/AD-117**.



(Vector mode)

(GAIN ×5)

Note

After adjustment is completed, set the switch as follows.

- S2963 [F-8]/AD-117→ON

2-5-6. SDI R-Y/B-Y Level Adjustment

Equipment : Digital waveform monitor (Vector mode)

Board : AD-117

Preparations :

- Connect the digital waveform monitor to the CN2571 [R-7]/AD-117 via the coaxial connector converter.

• BARS button/MSU-700 →“ON”

• S2963 [F-8]/AD-117 →“OFF”

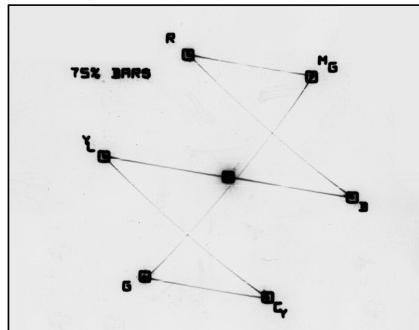
Test point : CN2571 [R-7]/AD-117

Adjustment point : **ORV2131 [B-6]/AD-117**

ORV2231 [A-8]/AD-117

Adjustment procedures

1. Put the digital waveform monitor into the vector mode.
2. Adjust the level so that six beam spots are placed inside the \bigcirc frame by turning **ORV2131 [B-7]/AD-117** and **ORV2231 [A-8]/AD-117**.



(Vector mode)

Note

After adjustment is completed, set the switch as follows.

- S2963 [F-8]/AD-117→ON

2-6. Board Switch Settings After Finishing Adjustment

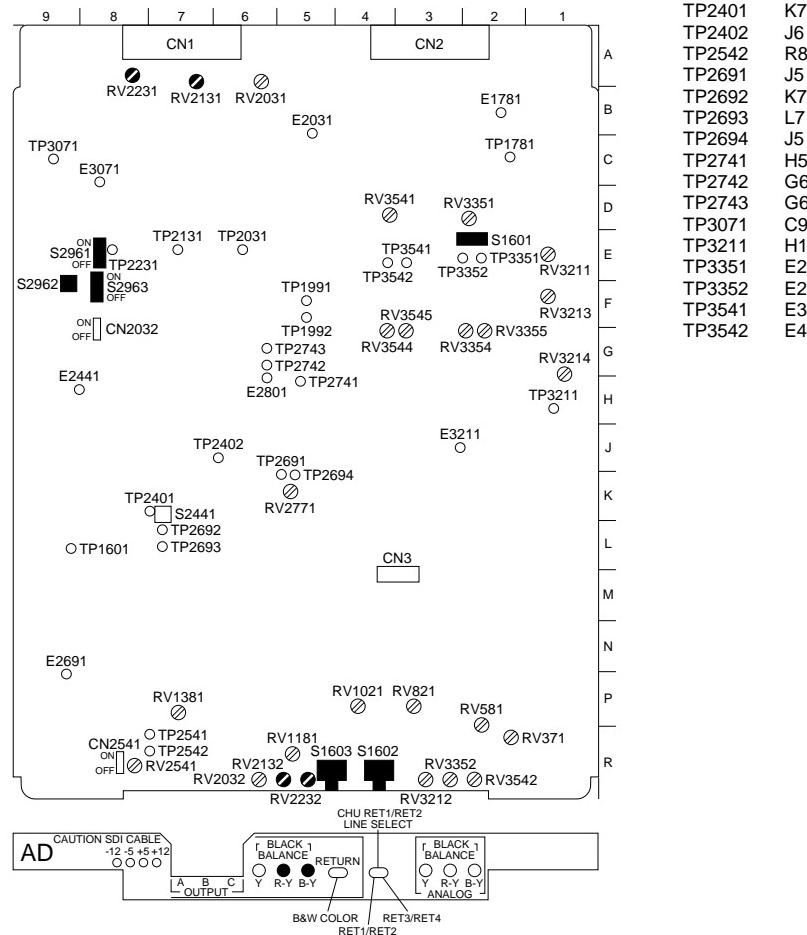
- Switch setting

Make sure the internal switch settings after the adjustments are completed.

The following shows the factory setting condition for each switch.

Select the proper setting according to your system.

S1601 (TEST ON/OFF) [E-2]	"OFF"	CN2541 R8	SDI ON/OFF
S1602 (RET SELECT) [R-4]	"RET1/2"	E1781 B2	
S1603 (RET B/W COLOR) [R-5]	"COLOR"	E2031 C5	
CN2541 (SDI ON/OFF) [R-8]	"ON"	E2441 H9	
S2961 (SDI TEST) [E-8]	"OFF"	E2691 N9	
S2963 (REMOTE) [F-8]	"ON"	E2801 H6	
S2962 (D1 BAR-MODE) [F-9]		E3071 D8	
1	"OFF"	E3211 J3	
2	"OFF"	RV2031 B6	Y GAIN
3	"ON"	RV2032 R6	Y DC
4	"OFF"	RV2131 B7	R-Y GAIN
		RV2132 R5	R-Y DC
		RV2231 A8	B-Y GAIN
		RV2232 R5	B-Y DC
		RV2541 R8	FREE RUN FREQ. ADJ
		RV2771 K5	VIDEO-PHASE
		RV3211 E1	Y(DL)LEVEL
		RV3212 R3	Y BLK OFFSET
		RV3213 F1	Y(CC)LEVEL
		RV3214 G1	BLKG CUT
		RV3351 D2	R-Y (DL)LEVEL
		RV3352 R3	R-Y BLK OFFSET
		RV3354 F2	R-Y BLK
		RV3355 F2	R-Y (CC)LEVEL
		RV3541 D4	B-Y (DC) LEVEL
		RV3542 R3	B-Y BLK OFFSET
		RV3544 G4	B-Y BLK
		RV3545 G3	B-Y (CC)LEVEL
		S1601 E2	TEST ON/OFF
		S1602 R4	RET SELECT
		S1603 R5	RET B/W COLOR
		S2961 E8	SDI TEST
		S2962 F9	REMOTE
		S2963 F8	D1 BAR-MODE



Section 3

Spare Parts

3-1. Notes on Repair Parts

1. Safety Related Components Warning

Components marked Δ are critical to safe operation. Therefore, specified parts should be used in the case of replacement.

2. Standardization of Parts

Some repair parts supplied by Sony differ from those used for the unit. These are because of parts commonality and improvement.

Parts list has the present standardized repair parts.

3. Stock of Parts

Parts marked with “o” at SP(Supply Code) column of the spare parts list may not be stocked. Therefore, the delivery date will be delayed.

4. Units Representation

The following represented units are changed or omitted in writing.

Units	Representation	
Capacitance	μF	uF
Inductance	μH	uH
Resistance	Ω	Abbreviation
Temperature	$^{\circ}\text{C}$	XXX-DEG-C

3-2. Electrical Parts List

AD-117 BOARD

Ref. No.
or Q'ty Part No. SP Description

8pcs 1-533-223-11 s HOLDER, FUSE
1pc 3-694-171-01 o PC BOARD PANEL AD
1pc 3-681-020-01 o PC SHIELD PLATE
2pcs 3-681-042-01 o LEVER, PC BOARD(1)
2pcs 3-681-045-01 o LEVER, PC BOARD(2)

4pcs 7-626-320-11 s PIN, SPRING 3X8
9pcs 7-682-903-11 s SCREW +PWH 3X6
1pc 3-694-172-01 o LAVEL,CAUTION AD
1pc 1-562-372-00 s SOCKET, SHORT 2P

C361 1-126-391-11 s ELECT 47uF 20% 6.3V
C362 1-126-391-11 s ELECT 47uF 20% 6.3V
C363 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C364 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C371 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V

C372 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V
C373 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C374 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C375 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C376 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V

C377 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C378 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C379 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C381 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C382 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V

C383 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C471 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C473 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C474 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C475 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V

C476 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C541 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C542 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C591 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V
C592 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V

C593 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C594 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C595 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C596 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C597 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V

C598 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C599 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C601 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C602 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C603 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C681 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C683 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C684 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C685 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C686 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C741 1-126-391-11 s ELECT 47uF 20% 6.3V
C742 1-126-391-11 s ELECT 47uF 20% 6.3V
C743 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C744 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C821 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V

C822 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V
C823 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C824 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C825 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C826 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V

(AD-117 BOARD)

Ref. No.
or Q'ty Part No. SP Description

C827 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C828 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C829 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C831 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C832 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V

C833 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C911 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C913 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C914 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C915 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V

C916 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C971 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C972 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1021 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V
C1022 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V

C1023 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1024 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1025 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1026 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C1027 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V

C1028 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C1029 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C1031 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C1032 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C1033 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C1111 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1113 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C1114 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C1115 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C1116 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C1181 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V
C1182 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V
C1183 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1184 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1185 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C1186 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C1187 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C1188 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C1189 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C1191 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V

C1192 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C1193 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1271 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1273 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C1274 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V

C1275 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C1276 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1331 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1332 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1381 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V

C1382 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V
C1383 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1384 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1385 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
C1386 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V

C1387 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
C1388 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C1389 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
C1391 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V

(AD-117 BOARD)

Ref. No.
or Q'ty Part No. SP Description

C1392 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
 C1393 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1471 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1473 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
 C1474 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V

C1475 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
 C1476 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1519 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1520 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1551 1-126-391-11 s ELECT 47uF 20% 6.3V

C1552 1-126-391-11 s ELECT 47uF 20% 6.3V
 C1553 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1554 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1557 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
 C1558 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V

C1559 1-135-071-21 s TANTALUM, CHIP 0.15uF 10% 35V
 C1562 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1601 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C1602 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C1603 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C1616 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1617 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1619 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
 C1620 1-135-201-11 s TANTALUM 10uF 20% 6.3V
 C1661 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V

C1662 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1664 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1665 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1666 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1761 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V

C1762 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1781 1-126-396-11 s ELECT, CHIP 47uF 20% 16V
 C1782 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1783 1-126-391-11 s ELECT 47uF 20% 6.3V
 C1784 1-126-391-11 s ELECT 47uF 20% 6.3V

C1785 1-126-391-11 s ELECT 47uF 20% 6.3V
 C1786 1-126-391-11 s ELECT 47uF 20% 6.3V
 C1787 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1788 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1789 1-126-391-11 s ELECT 47uF 20% 6.3V

C1790 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1791 1-126-396-11 s ELECT, CHIP 47uF 20% 16V
 C1792 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1793 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1794 1-126-391-11 s ELECT 47uF 20% 6.3V

C1795 1-126-391-11 s ELECT 47uF 20% 6.3V
 C1796 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V
 C1797 1-113-642-11 s TANTALUM, CHIP 47uF 20% 10V
 C1798 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1799 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C1800 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C1801 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C1803 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1804 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1991 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V

C1992 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1993 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C1994 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V
 C1995 1-163-251-11 s CERAMIC, CHIP 100PF 5% 50V

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C1996 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C1997 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C1998 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C1999 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2031 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C2032 1-163-092-00 s CERAMIC, CHIP 9PF 50V
 C2034 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2035 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2036 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2037 1-126-391-11 s ELECT 47uF 20% 6.3V

C2038 1-126-391-11 s ELECT 47uF 20% 6.3V
 C2039 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2040 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C2041 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2042 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V

C2043 1-135-079-21 s TANTALUM, CHIP 3.3uF 20% 25V
 C2044 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2045 1-135-079-21 s TANTALUM, CHIP 3.3uF 20% 25V
 C2046 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2047 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V

C2048 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C2049 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 50V
 C2050 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 50V
 C2051 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 50V
 C2052 1-164-005-11 s CERAMIC, CHIP 0.47uF 25V

C2053 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C2054 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C2055 1-164-005-11 s CERAMIC, CHIP 0.47uF 25V
 C2056 1-135-161-21 s TANTALUM, CHIP 22uF 10% 10V
 C2057 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C2058 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C2059 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2060 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2061 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2062 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C2063 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2064 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C2065 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2066 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2067 1-135-210-11 s TANTALUM 4.7uF 10% 10V

C2068 1-164-232-11 s CERAMIC, CHIP 0.01uF 10% 50V
 C2069 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C2070 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2071 1-163-275-11 s CERAMIC 0.001uF 5% 50V
 C2072 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C2073 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2074 1-163-224-11 s CERAMIC, CHIP 7PF 0.25PF 50V
 C2132 1-163-087-00 s CERAMIC, CHIP 4PF 50V
 C2134 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2135 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

C2136 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2137 1-126-391-11 s ELECT 47uF 20% 6.3V
 C2138 1-126-391-11 s ELECT 47uF 20% 6.3V
 C2139 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2140 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V

C2141 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V
 C2142 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C2143 1-135-079-21 s TANTALUM, CHIP 3.3uF 20% 25V
 C2144 1-163-809-11 s CERAMIC, CHIP 0.047uF 10% 25V

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C2145	1-135-079-21	s TANTALUM, CHIP 3.3uF 20% 25V
C2146	1-163-809-11	s CERAMIC, CHIP 0.047uF 10% 25V
C2147	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2148	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2149	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V

C2150	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2151	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2152	1-164-005-11	s CERAMIC, CHIP 0.47uF 25V
C2153	1-164-005-11	s CERAMIC, CHIP 0.47uF 25V
C2154	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V

C2155	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2156	1-135-161-21	s TANTALUM, CHIP 22uF 10% 10V
C2157	1-163-809-11	s CERAMIC, CHIP 0.047uF 10% 25V
C2158	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2159	1-163-809-11	s CERAMIC, CHIP 0.047uF 10% 25V

C2160	1-163-809-11	s CERAMIC, CHIP 0.047uF 10% 25V
C2161	1-163-809-11	s CERAMIC, CHIP 0.047uF 10% 25V
C2162	1-163-809-11	s CERAMIC, CHIP 0.047uF 10% 25V
C2163	1-163-809-11	s CERAMIC, CHIP 0.047uF 10% 25V
C2164	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V

C2165	1-163-809-11	s CERAMIC, CHIP 0.047uF 10% 25V
C2166	1-163-809-11	s CERAMIC, CHIP 0.047uF 10% 25V
C2167	1-135-210-11	s TANTALUM 4.7uF 10% 10V
C2168	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2169	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V

C2170	1-163-809-11	s CERAMIC, CHIP 0.047uF 10% 25V
C2171	1-163-275-11	s CERAMIC 0.001uF 5% 50V
C2172	1-163-809-11	s CERAMIC, CHIP 0.047uF 10% 25V
C2173	1-163-809-11	s CERAMIC, CHIP 0.047uF 10% 25V
C2174	1-163-224-11	s CERAMIC, CHIP 7PF 0.25PF 50V

C2232	1-163-087-00	s CERAMIC, CHIP 4PF 50V
C2234	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2235	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2236	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2237	1-126-391-11	s ELECT 47uF 20% 6.3V

C2238	1-126-391-11	s ELECT 47uF 20% 6.3V
C2239	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2240	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2241	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2242	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V

C2243	1-135-079-21	s TANTALUM, CHIP 3.3uF 20% 25V
C2244	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2245	1-135-079-21	s TANTALUM, CHIP 3.3uF 20% 25V
C2246	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2247	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V

C2248	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2249	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2250	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2251	1-164-005-11	s CERAMIC, CHIP 0.47uF 25V
C2252	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V

C2253	1-164-005-11	s CERAMIC, CHIP 0.47uF 25V
C2254	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2255	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2256	1-135-161-21	s TANTALUM, CHIP 22uF 10% 10V
C2257	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V

C2258	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2259	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2260	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2261	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V

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C2262	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2263	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2264	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2265	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2266	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V

C2267	1-135-210-11	s TANTALUM 4.7uF 10% 10V
C2268	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2269	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2270	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2271	1-163-275-11	s CERAMIC 0.001uF 5% 50V

C2272	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2273	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2274	1-163-224-11	s CERAMIC, CHIP 7PF 0.25PF 50V
C2361	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2362	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V

C2363	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2364	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2365	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2366	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2367	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V

C2368	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2369	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2370	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2371	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2372	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V

C2381	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2382	1-164-005-11	s CERAMIC, CHIP 0.47uF 25V
C2383	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2384	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2401	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V

C2402	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2441	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2442	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2443	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2444	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V

C2445	1-135-164-21	s TANTALUM, CHIP 22uF 20% 10V
C2446	1-163-217-11	s CERAMIC 1PF 0.25PF 50V
C2447	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2448	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2449	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V

C2450	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2451	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2452	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2453	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2454	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V

C2455	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2456	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2457	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2458	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2459	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V

C2460	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2511	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2512	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2527	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2541	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V

C2542	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2543	1-135-159-21	s TANTALUM, CHIP 10uF 10% 20V
C2544	1-163-121-00	s CERAMIC, CHIP 150PF 5% 50V
C2545	1-163-259-91	s CERAMIC, CHIP 220PF 5% 50V

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C2546	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2547	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2571	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2572	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2573	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2581	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2591	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2592	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2691	1-163-251-11	s CERAMIC, CHIP 100PF 5% 50V
C2692	1-163-251-11	s CERAMIC, CHIP 100PF 5% 50V
C2693	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2696	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2697	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2698	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2699	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2700	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2701	1-135-161-21	s TANTALUM, CHIP 22uF 10% 10V
C2741	1-163-259-91	s CERAMIC, CHIP 220PF 5% 50V
C2742	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2743	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2744	1-163-259-91	s CERAMIC, CHIP 220PF 5% 50V
C2745	1-163-259-91	s CERAMIC, CHIP 220PF 5% 50V
C2746	1-163-259-91	s CERAMIC, CHIP 220PF 5% 50V
C2771	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2772	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2773	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C2774	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2775	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2776	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2777	1-135-089-21	s TANTALUM, CHIP 6.8uF 10% 20V
C2778	1-163-121-00	s CERAMIC, CHIP 150PF 5% 50V
C2779	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2780	1-135-161-21	s TANTALUM, CHIP 22uF 10% 10V
C2801	1-135-071-21	s TANTALUM, CHIP 0.15uF 10% 35V
C2802	1-135-165-11	s TANTALUM, CHIP 33uF 10% 16V
C2803	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2804	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2805	1-163-231-11	s CERAMIC, CHIP 15PF 5% 50V
C2806	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2807	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C2951	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2952	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2953	1-164-232-11	s CERAMIC, CHIP 0.01uF 10% 50V
C2961	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2981	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2982	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C2983	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C2984	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3071	1-126-391-11	s ELECT 47uF 20% 6.3V
C3072	1-126-391-11	s ELECT 47uF 20% 6.3V
C3073	1-135-125-21	s TANTALUM 33uF 20% 10V
C3074	1-126-391-11	s ELECT 47uF 20% 6.3V
C3075	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3076	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3077	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C3078	1-126-391-11	s ELECT 47uF 20% 6.3V
C3079	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3080	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3081	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V

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C3110	1-126-391-11	s ELECT 47uF 20% 6.3V
C3111	1-126-391-11	s ELECT 47uF 20% 6.3V
C3112	1-126-391-11	s ELECT 47uF 20% 6.3V
C3113	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3114	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3115	1-126-391-11	s ELECT 47uF 20% 6.3V
C3116	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3211	1-126-391-11	s ELECT 47uF 20% 6.3V
C3212	1-126-391-11	s ELECT 47uF 20% 6.3V
C3213	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3214	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3217	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3218	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3219	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3220	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3221	1-163-227-11	s CERAMIC, CHIP 10PF 5% 50V
C3230	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3231	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3235	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3236	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3241	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C3242	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C3243	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C3244	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3245	1-126-391-11	s ELECT 47uF 20% 6.3V
C3246	1-163-227-11	s CERAMIC, CHIP 10PF 5% 50V
C3250	1-126-391-11	s ELECT 47uF 20% 6.3V
C3251	1-126-391-11	s ELECT 47uF 20% 6.3V
C3252	1-126-391-11	s ELECT 47uF 20% 6.3V
C3253	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3254	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3259	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3351	1-126-391-11	s ELECT 47uF 20% 6.3V
C3352	1-126-391-11	s ELECT 47uF 20% 6.3V
C3353	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3354	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3357	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3358	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3359	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3360	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3364	1-163-227-11	s CERAMIC, CHIP 10PF 5% 50V
C3370	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3371	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3372	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C3373	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3374	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3375	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C3376	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3377	1-135-177-21	s TANTALUM, CHIP 1uF 10% 25V
C3378	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3381	1-135-259-11	s TANTALUM, CHIP 10uF 20% 6.3V
C3382	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C3383	1-135-216-11	s TANTALUM, CHIP 10uF 20% 10V
C3384	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3385	1-163-222-11	s CERAMIC 5PF 0.25PF 50V
C3541	1-126-391-11	s ELECT 47uF 20% 6.3V
C3542	1-126-391-11	s ELECT 47uF 20% 6.3V
C3543	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V
C3544	1-163-038-00	s CERAMIC, CHIP 0.1uF 25V

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C3547 1-163-038-00 s CERAMIC, CHIP 0.1uF 25V
 C3548 1-163-038-00 s CERAMIC, CHIP 0.1uF 25V
 C3549 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
 C3550 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
 C3554 1-163-227-11 s CERAMIC, CHIP 10PF 5% 50V

C3560 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
 C3561 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
 C3562 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
 C3563 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V
 C3564 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V

C3565 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
 C3566 1-163-038-00 s CERAMIC, CHIP 0.1uF 25V
 C3567 1-135-177-21 s TANTALUM, CHIP 1uF 10% 25V
 C3568 1-163-038-00 s CERAMIC, CHIP 0.1uF 25V
 C3571 1-135-259-11 s TANTALUM, CHIP 10uF 20% 6.3V

C3572 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C3573 1-135-216-11 s TANTALUM, CHIP 10uF 20% 10V
 C3574 1-163-038-00 s CERAMIC, CHIP 0.1uF 25V
 C3575 1-163-222-11 s CERAMIC 5PF 0.25PF 50V

CN1 1-774-668-11 o CONNECTOR, BOARD TO BOARD 96P
 CN2 1-774-668-11 o CONNECTOR, BOARD TO BOARD 96P
 CN2541 1-564-948-21 o PIN, CONNECTOR 3P
 CN2571 1-750-880-11 s RECEPTACLE, COAXIAL CONNECTOR, BNC
 CN2572 1-750-880-11 s RECEPTACLE, COAXIAL CONNECTOR, BNC
 CN2581 1-750-880-11 s RECEPTACLE, COAXIAL CONNECTOR, BNC

D371 8-719-800-76 s DIODE 1SS226
 D591 8-719-800-76 s DIODE 1SS226
 D741 8-719-800-76 s DIODE 1SS226
 D761 8-719-800-76 s DIODE 1SS226
 D781 8-719-800-76 s DIODE 1SS226

D821 8-719-800-76 s DIODE 1SS226
 D1021 8-719-800-76 s DIODE 1SS226
 D1181 8-719-800-76 s DIODE 1SS226
 D1381 8-719-800-76 s DIODE 1SS226
 D1551 8-719-104-34 s DIODE 1S2836

D1601 8-719-104-34 s DIODE 1S2836
 D1781 8-719-974-41 s DIODE HLMP-6500-010
 D1782 8-719-974-41 s DIODE HLMP-6500-010
 D1783 8-719-974-41 s DIODE HLMP-6500-010
 D1784 8-719-974-41 s DIODE HLMP-6500-010

D1785 8-719-157-23 s DIODE RD4.7M-B
 D1786 8-719-157-23 s DIODE RD4.7M-B
 D1787 8-759-274-67 s IC LM4040BIM3X-5.0
 D1789 8-719-801-78 s DIODE 1SS184
 D1790 8-719-800-76 s DIODE 1SS226

D2541 8-719-800-76 s DIODE 1SS226
 D2691 8-719-948-47 s DIODE HSM88AS
 D2692 8-719-948-47 s DIODE HSM88AS
 D2771 8-719-800-76 s DIODE 1SS226
 D2801 8-719-800-76 s DIODE 1SS226

D3072 8-719-157-23 s DIODE RD4.7M-B
 D3111 8-719-157-23 s DIODE RD4.7M-B

DL1551 1-415-781-21 s DELAY LINE, LC
 DL1552 1-415-660-11 s DELAY LINE, LC 355 nS

DL3212 1-415-304-21 s DELAY LINE (Y)

DL3352 1-415-304-21 s DELAY LINE (Y)

DL3542 1-415-304-21 s DELAY LINE (Y)

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E1781 3-673-772-01 s TERMINAL, TP
 E2031 3-673-772-01 s TERMINAL, TP
 E2441 3-673-772-01 s TERMINAL, TP
 E2691 3-673-772-01 s TERMINAL, TP
 E2801 3-673-772-01 s TERMINAL, TP

E3071 3-673-772-01 s TERMINAL, TP
 E3211 3-673-772-01 s TERMINAL, TP
 F1781 ! 1-576-228-11 s FUSE (H.B.C.) 2A 250V
 F1782 ! 1-576-228-11 s FUSE (H.B.C.) 2A 250V
 F3071 ! 1-576-228-11 s FUSE (H.B.C.) 2A 250V
 F3110 ! 1-576-228-11 s FUSE (H.B.C.) 2A 250V

FL2031 1-236-964-11 s FILTER, LOW PASS
 FL2131 1-236-963-11 s FILTER, LOW PASS
 FL2231 1-236-963-11 s FILTER, LOW PASS

IC361 8-759-054-61 s IC CLC505AJE
 IC371 8-759-927-46 s IC SN74HC00ANS
 IC372 8-759-238-51 s IC TC74HC4051AF(EL)
 IC373 8-759-030-55 s IC MC1496M
 IC374 8-759-105-49 s IC UPC319G2

IC376 8-759-030-55 s IC MC1496M
 IC461 8-759-054-61 s IC CLC505AJE
 IC471 8-759-238-51 s IC TC74HC4051AF(EL)
 IC472 8-759-030-55 s IC MC1496M
 IC474 8-759-030-55 s IC MC1496M

IC531 8-759-054-61 s IC CLC505AJE
 IC541 8-759-082-61 s IC TC4W53FU
 IC542 8-759-635-27 s IC M62352GP
 IC543 8-759-906-54 s IC TL064CNS
 IC544 8-759-906-54 s IC TL064CNS

IC551 8-759-054-61 s IC CLC505AJE
 IC591 8-759-927-46 s IC SN74HC00ANS
 IC592 8-759-238-51 s IC TC74HC4051AF(EL)
 IC593 8-759-030-55 s IC MC1496M
 IC594 8-759-105-49 s IC UPC319G2

IC596 8-759-030-55 s IC MC1496M
 IC681 8-759-238-51 s IC TC74HC4051AF(EL)
 IC682 8-759-030-55 s IC MC1496M
 IC684 8-759-030-55 s IC MC1496M
 IC821 8-759-927-46 s IC SN74HC00ANS

IC822 8-759-238-51 s IC TC74HC4051AF(EL)
 IC823 8-759-030-55 s IC MC1496M
 IC824 8-759-105-49 s IC UPC319G2
 IC826 8-759-030-55 s IC MC1496M
 IC911 8-759-238-51 s IC TC74HC4051AF(EL)

IC912 8-759-030-55 s IC MC1496M
 IC914 8-759-030-55 s IC MC1496M
 IC971 8-759-635-27 s IC M62352GP
 IC972 8-759-906-54 s IC TL064CNS
 IC973 8-759-906-54 s IC TL064CNS

IC1021 8-759-927-46 s IC SN74HC00ANS
 IC1022 8-759-238-51 s IC TC74HC4051AF(EL)
 IC1023 8-759-030-55 s IC MC1496M
 IC1024 8-759-105-49 s IC UPC319G2
 IC1026 8-759-030-55 s IC MC1496M

IC1111 8-759-238-51 s IC TC74HC4051AF(EL)
 IC1112 8-759-030-55 s IC MC1496M
 IC1114 8-759-030-55 s IC MC1496M
 IC1181 8-759-927-46 s IC SN74HC00ANS

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Ref. No. or Q'ty	Part No.	SP Description
IC1182	8-759-238-51 s	IC TC74HC4051AF(EL)
IC1183	8-759-030-55 s	IC MC1496M
IC1184	8-759-105-49 s	IC UPC319G2
IC1186	8-759-030-55 s	IC MC1496M
IC1271	8-759-238-51 s	IC TC74HC4051AF(EL)
IC1272	8-759-030-55 s	IC MC1496M
IC1274	8-759-030-55 s	IC MC1496M
IC1331	8-759-635-27 s	IC M62352GP
IC1332	8-759-906-54 s	IC TL064CNS
IC1333	8-759-906-54 s	IC TL064CNS
IC1381	8-759-927-46 s	IC SN74HC00ANS
IC1382	8-759-238-51 s	IC TC74HC4051AF(EL)
IC1383	8-759-030-55 s	IC MC1496M
IC1384	8-759-105-49 s	IC UPC319G2
IC1386	8-759-030-55 s	IC MC1496M
IC1471	8-759-238-51 s	IC TC74HC4051AF(EL)
IC1472	8-759-030-55 s	IC MC1496M
IC1474	8-759-030-55 s	IC MC1496M
IC1551	8-759-105-49 s	IC UPC319G2
IC1552	8-759-082-55 s	IC TC7W00FU
IC1553	8-759-082-61 s	IC TC4W53FU
IC1554	8-759-082-61 s	IC TC4W53FU
IC1606	8-759-008-79 s	IC MC14011BF
IC1607	8-759-008-84 s	IC MC14015BF
IC1608	8-759-008-79 s	IC MC14011BF
IC1609	8-759-008-74 s	IC MC14001BF
IC1661	8-759-009-04 s	IC MC14050BF
IC1662	8-759-147-84 s	IC CXD8072Q
IC1663	8-759-925-76 s	IC SN74HC08ANS
IC1664	8-759-946-00 s	IC MB88341PFV
IC1665	8-759-925-76 s	IC SN74HC08ANS
IC1666	8-759-926-25 s	IC SN74HC165ANS
IC1761	8-759-147-84 s	IC CXD8072Q
IC1762	8-759-925-82 s	IC SN74HC21NS
IC1763	8-759-058-58 s	IC TC7S04FU(TE85R)
IC1781	8-759-168-19 s	IC TA78L09F-T1
IC1782	8-759-906-53 s	IC TL062CPS
IC1783	8-759-238-51 s	IC TC74HC4051AF(EL)
IC1785	8-759-906-53 s	IC TL062CPS
IC1786	8-759-062-66 s	IC TC7S66F
IC1991	8-759-970-59 s	IC TLC272CPS
IC1992	8-759-946-00 s	IC MB88341PFV
IC2031	8-759-054-61 s	IC CLC505AJE
IC2032	8-752-052-82 s	IC CXA1432M
IC2033	8-752-052-70 s	IC CXA1487M
IC2034	8-752-069-11 s	IC CXA1577R-7
IC2035	8-759-030-55 s	IC MC1496M
IC2131	8-759-054-61 s	IC CLC505AJE
IC2132	8-752-052-82 s	IC CXA1432M
IC2133	8-752-052-70 s	IC CXA1487M
IC2134	8-752-069-11 s	IC CXA1577R-7
IC2135	8-759-030-55 s	IC MC1496M
IC2231	8-759-054-61 s	IC CLC505AJE
IC2232	8-752-052-82 s	IC CXA1432M
IC2233	8-752-052-70 s	IC CXA1487M
IC2234	8-752-069-11 s	IC CXA1577R-7
IC2235	8-759-030-55 s	IC MC1496M
IC2361	8-752-360-44 s	IC CXK1203AR
IC2381	8-759-925-74 s	IC SN74HC04ANS-E20

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Ref. No. or Q'ty	Part No.	SP Description
IC2420	8-759-926-82 s	IC SN74HC574ANS
IC2421	8-759-926-82 s	IC SN74HC574ANS
IC2422	8-759-926-82 s	IC SN74HC574ANS
IC2423	8-759-926-82 s	IC SN74HC574ANS
IC2424	8-759-926-82 s	IC SN74HC574ANS
IC2425	8-752-360-44 s	IC CXK1203AR
IC2441	8-759-925-74 s	IC SN74HC04ANS-E20
IC2442	8-759-150-97 s	IC CXD8068G
IC2443	8-759-926-82 s	IC SN74HC574ANS
IC2444	8-759-012-02 s	IC MC10H124M
IC2445	8-759-012-02 s	IC MC10H124M
IC2446	8-759-012-02 s	IC MC10H124M
IC2447	8-759-926-82 s	IC SN74HC574ANS
IC2448	8-759-926-82 s	IC SN74HC574ANS
IC2541	8-741-601-11 s	IC SBX1601A
IC2542	8-759-058-58 s	IC TC7S04FU(TE85R)
IC2543	8-759-101-12 s	IC UPC311G2
IC2691	8-759-925-74 s	IC SN74HC04ANS-E20
IC2692	8-759-925-85 s	IC SN74HC32ANS
IC2693	8-759-925-90 s	IC SN74HC74ANS
IC2695	8-759-925-74 s	IC SN74HC04ANS-E20
IC2741	8-759-925-74 s	IC SN74HC04ANS-E20
IC2742	8-759-239-58 s	IC TC74HC221AF
IC2743	8-759-239-58 s	IC TC74HC221AF
IC2771	8-759-970-59 s	IC TLC272CPS
IC2772	8-759-902-88 s	IC SN74LS123NS
IC2773	8-759-082-61 s	IC TC4W53FU
IC2801	8-759-926-06 s	IC SN74HC126ANS
IC2802	8-759-925-74 s	IC SN74HC04ANS-E20
IC2911	8-759-925-74 s	IC SN74HC04ANS-E20
IC2916	8-759-037-79 s	IC SN74HC163ANS
IC2917	8-759-037-79 s	IC SN74HC163ANS
IC2922	8-759-011-65 s	IC MC74HC4053F
IC2923	8-759-058-62 s	IC TC7S08FU(TE85R)
IC2924	8-759-060-79 s	IC 27HC642-REC0905-2
IC2925	8-759-060-80 s	IC 27HC642-REC0906-2
IC3071	8-759-906-53 s	IC TL062CPS
IC3072	8-759-973-71 s	IC TL7705CPS-B
IC3211	8-759-008-37 s	IC MC74HC4050F
IC3212	8-759-011-65 s	IC MC74HC4053F
IC3213	8-759-054-61 s	IC CLC505AJE
IC3214	8-759-906-53 s	IC TL062CPS
IC3215	8-759-082-61 s	IC TC4W53FU
IC3217	8-759-030-55 s	IC MC1496M
IC3219	8-759-035-87 s	IC TC7S00F(TE85R)
IC3351	8-759-011-65 s	IC MC74HC4053F
IC3352	8-759-054-61 s	IC CLC505AJE
IC3353	8-759-906-53 s	IC TL062CPS
IC3355	8-759-030-55 s	IC MC1496M
IC3356	8-759-030-55 s	IC MC1496M
IC3357	8-759-030-55 s	IC MC1496M
IC3541	8-759-011-65 s	IC MC74HC4053F
IC3542	8-759-054-61 s	IC CLC505AJE
IC3543	8-759-906-53 s	IC TL062CPS
IC3544	8-759-060-53 s	IC MC1496M
IC3545	8-759-030-55 s	IC MC1496M
IC3546	8-759-030-55 s	IC MC1496M
IC3547	8-759-030-55 s	IC MC1496M
IS2442	1-526-856-11 s	SOCKET, IC (PGA) 133P

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Ref. No. or Q'ty	Part No.	SP Description
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IS2541	1-540-106-11	o SOCKET, IC
IS2924	1-526-816-21	s SOCKET, IC 24P
IS2925	1-526-816-21	s SOCKET, IC 24P
L361	1-412-030-11	s INDUCTOR CHIP 22uH
L362	1-412-030-11	s INDUCTOR CHIP 22uH
L371	1-412-030-11	s INDUCTOR CHIP 22uH
L372	1-412-030-11	s INDUCTOR CHIP 22uH
L591	1-412-030-11	s INDUCTOR CHIP 22uH
L592	1-412-030-11	s INDUCTOR CHIP 22uH
L741	1-412-030-11	s INDUCTOR CHIP 22uH
L742	1-412-030-11	s INDUCTOR CHIP 22uH
L821	1-412-030-11	s INDUCTOR CHIP 22uH
L822	1-412-030-11	s INDUCTOR CHIP 22uH
L1021	1-412-030-11	s INDUCTOR CHIP 22uH
L1022	1-412-030-11	s INDUCTOR CHIP 22uH
L1181	1-412-030-11	s INDUCTOR CHIP 22uH
L1182	1-412-030-11	s INDUCTOR CHIP 22uH
L1381	1-412-030-11	s INDUCTOR CHIP 22uH
L1382	1-412-030-11	s INDUCTOR CHIP 22uH
L1551	1-412-030-11	s INDUCTOR CHIP 22uH
L1552	1-412-030-11	s INDUCTOR CHIP 22uH
L1601	1-412-030-11	s INDUCTOR CHIP 22uH
L1661	1-412-030-11	s INDUCTOR CHIP 22uH
L1761	1-412-030-11	s INDUCTOR CHIP 22uH
L1781	1-414-529-21	s INDUCTOR (POWER)
L1782	1-414-529-21	s INDUCTOR (POWER)
L1783	1-412-030-11	s INDUCTOR CHIP 22uH
L1784	1-412-030-11	s INDUCTOR CHIP 22uH
L1991	1-412-030-11	s INDUCTOR CHIP 22uH
L1992	1-412-030-11	s INDUCTOR CHIP 22uH
L1993	1-412-030-11	s INDUCTOR CHIP 22uH
L1994	1-412-030-11	s INDUCTOR CHIP 22uH
L2031	1-412-030-11	s INDUCTOR CHIP 22uH
L2032	1-412-030-11	s INDUCTOR CHIP 22uH
L2033	1-412-030-11	s INDUCTOR CHIP 22uH
L2034	1-412-030-11	s INDUCTOR CHIP 22uH
L2035	1-412-030-11	s INDUCTOR CHIP 22uH
L2036	1-412-030-11	s INDUCTOR CHIP 22uH
L2037	1-412-030-11	s INDUCTOR CHIP 22uH
L2038	1-412-029-11	s INDUCTOR CHIP 10uH
L2039	1-412-030-11	s INDUCTOR CHIP 22uH
L2131	1-412-030-11	s INDUCTOR CHIP 22uH
L2132	1-412-030-11	s INDUCTOR CHIP 22uH
L2133	1-412-030-11	s INDUCTOR CHIP 22uH
L2134	1-412-030-11	s INDUCTOR CHIP 22uH
L2135	1-412-030-11	s INDUCTOR CHIP 22uH
L2136	1-412-030-11	s INDUCTOR CHIP 22uH
L2137	1-412-030-11	s INDUCTOR CHIP 22uH
L2138	1-412-029-11	s INDUCTOR CHIP 10uH
L2139	1-412-030-11	s INDUCTOR CHIP 22uH
L2231	1-412-030-11	s INDUCTOR CHIP 22uH
L2232	1-412-030-11	s INDUCTOR CHIP 22uH
L2233	1-412-030-11	s INDUCTOR CHIP 22uH
L2234	1-412-030-11	s INDUCTOR CHIP 22uH
L2235	1-412-030-11	s INDUCTOR CHIP 22uH
L2236	1-412-030-11	s INDUCTOR CHIP 22uH
L2237	1-412-030-11	s INDUCTOR CHIP 22uH
L2238	1-412-029-11	s INDUCTOR CHIP 10uH

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Ref. No. or Q'ty	Part No.	SP Description
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L2239	1-412-030-11	s INDUCTOR CHIP 22uH
L2361	1-412-029-11	s INDUCTOR CHIP 10uH
L2381	1-412-029-11	s INDUCTOR CHIP 10uH
L2382	1-412-029-11	s INDUCTOR CHIP 10uH
L2401	1-412-029-11	s INDUCTOR CHIP 10uH
L2441	1-412-029-11	s INDUCTOR CHIP 10uH
L2442	1-412-029-11	s INDUCTOR CHIP 10uH
L2443	1-412-029-11	s INDUCTOR CHIP 10uH
L2444	1-412-029-11	s INDUCTOR CHIP 10uH
L2541	1-412-931-11	s INDUCTOR 0.22uH
L2542	1-412-030-11	s INDUCTOR CHIP 22uH
L2543	1-412-029-11	s INDUCTOR CHIP 10uH
L2551	1-412-030-11	s INDUCTOR CHIP 22uH
L2552	1-412-030-11	s INDUCTOR CHIP 22uH
L2691	1-412-030-11	s INDUCTOR CHIP 22uH
L2692	1-412-030-11	s INDUCTOR CHIP 22uH
L2741	1-412-030-11	s INDUCTOR CHIP 22uH
L2771	1-412-030-11	s INDUCTOR CHIP 22uH
L2801	1-412-030-11	s INDUCTOR CHIP 22uH
L2802	1-408-769-41	s INDUCTOR CHIP 2.2uH
L2803	1-412-030-11	s INDUCTOR CHIP 22uH
L2951	1-412-030-11	s INDUCTOR CHIP 22uH
L2981	1-412-029-11	s INDUCTOR CHIP 10uH
L3071	1-414-529-21	s INDUCTOR (POWER)
L3072	1-412-029-11	s INDUCTOR CHIP 10uH
L3110	1-414-529-21	s INDUCTOR (POWER)
L3211	1-412-030-11	s INDUCTOR CHIP 22uH
L3212	1-412-030-11	s INDUCTOR CHIP 22uH
L3215	1-412-030-11	s INDUCTOR CHIP 22uH
L3216	1-412-030-11	s INDUCTOR CHIP 22uH
L3218	1-412-030-11	s INDUCTOR CHIP 22uH
L3351	1-412-030-11	s INDUCTOR CHIP 22uH
L3352	1-412-030-11	s INDUCTOR CHIP 22uH
L3541	1-412-030-11	s INDUCTOR CHIP 22uH
Q361	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q371	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q372	8-729-122-63	s TRANSISTOR 2SA1226
Q373	8-729-122-63	s TRANSISTOR 2SA1226
Q374	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q375	8-729-216-22	s TRANSISTOR 2SA1162
Q376	8-729-216-22	s TRANSISTOR 2SA1162
Q377	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q378	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q379	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q380	8-729-122-63	s TRANSISTOR 2SA1226
Q381	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q382	8-729-402-19	s TRANSISTOR XN6501
Q383	8-729-216-22	s TRANSISTOR 2SA1162
Q384	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q385	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q386	8-729-402-78	s TRANSISTOR XN6401
Q387	8-729-402-19	s TRANSISTOR XN6501
Q388	8-729-122-63	s TRANSISTOR 2SA1226
Q471	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q472	8-729-122-63	s TRANSISTOR 2SA1226
Q473	8-729-122-63	s TRANSISTOR 2SA1226
Q474	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q476	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q477	8-729-120-28	s TRANSISTOR 2SC1623-L5L6

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Ref. No.
or Q'ty Part No. SP Description

Q531 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q591 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q592 8-729-122-63 s TRANSISTOR 2SA1226
 Q593 8-729-122-63 s TRANSISTOR 2SA1226
 Q594 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q595 8-729-216-22 s TRANSISTOR 2SA1162
 Q596 8-729-216-22 s TRANSISTOR 2SA1162
 Q597 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q598 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q599 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q600 8-729-122-63 s TRANSISTOR 2SA1226
 Q601 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q602 8-729-402-19 s TRANSISTOR XN6501
 Q603 8-729-216-22 s TRANSISTOR 2SA1162
 Q604 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q605 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q606 8-729-402-78 s TRANSISTOR XN6401
 Q607 8-729-402-19 s TRANSISTOR XN6501
 Q608 8-729-122-63 s TRANSISTOR 2SA1226
 Q681 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q682 8-729-122-63 s TRANSISTOR 2SA1226
 Q683 8-729-122-63 s TRANSISTOR 2SA1226
 Q684 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q686 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q687 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q741 8-729-122-63 s TRANSISTOR 2SA1226
 Q742 8-729-122-63 s TRANSISTOR 2SA1226
 Q761 8-729-122-63 s TRANSISTOR 2SA1226
 Q762 8-729-122-63 s TRANSISTOR 2SA1226
 Q781 8-729-122-63 s TRANSISTOR 2SA1226

Q782 8-729-122-63 s TRANSISTOR 2SA1226
 Q821 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q822 8-729-122-63 s TRANSISTOR 2SA1226
 Q823 8-729-122-63 s TRANSISTOR 2SA1226
 Q824 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q825 8-729-216-22 s TRANSISTOR 2SA1162
 Q826 8-729-216-22 s TRANSISTOR 2SA1162
 Q827 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q828 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q829 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q830 8-729-122-63 s TRANSISTOR 2SA1226
 Q831 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q832 8-729-402-19 s TRANSISTOR XN6501
 Q833 8-729-216-22 s TRANSISTOR 2SA1162
 Q834 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q835 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q836 8-729-402-78 s TRANSISTOR XN6401
 Q837 8-729-402-19 s TRANSISTOR XN6501
 Q838 8-729-122-63 s TRANSISTOR 2SA1226
 Q911 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q912 8-729-122-63 s TRANSISTOR 2SA1226
 Q913 8-729-122-63 s TRANSISTOR 2SA1226
 Q914 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q916 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q917 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q1021 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1022 8-729-122-63 s TRANSISTOR 2SA1226
 Q1023 8-729-122-63 s TRANSISTOR 2SA1226
 Q1024 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

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Ref. No.
or Q'ty Part No. SP Description

Q1025 8-729-216-22 s TRANSISTOR 2SA1162
 Q1026 8-729-216-22 s TRANSISTOR 2SA1162
 Q1027 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1028 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1029 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q1030 8-729-122-63 s TRANSISTOR 2SA1226
 Q1031 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1032 8-729-402-19 s TRANSISTOR XN6501
 Q1033 8-729-216-22 s TRANSISTOR 2SA1162
 Q1034 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q1035 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1036 8-729-402-78 s TRANSISTOR XN6401
 Q1037 8-729-402-19 s TRANSISTOR XN6501
 Q1038 8-729-122-63 s TRANSISTOR 2SA1226
 Q1111 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q1112 8-729-122-63 s TRANSISTOR 2SA1226
 Q1113 8-729-122-63 s TRANSISTOR 2SA1226
 Q1114 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1116 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1117 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q1181 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1182 8-729-122-63 s TRANSISTOR 2SA1226
 Q1183 8-729-122-63 s TRANSISTOR 2SA1226
 Q1184 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1185 8-729-216-22 s TRANSISTOR 2SA1162

Q1186 8-729-216-22 s TRANSISTOR 2SA1162
 Q1187 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1188 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1189 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1190 8-729-122-63 s TRANSISTOR 2SA1226

Q1191 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1192 8-729-402-19 s TRANSISTOR XN6501
 Q1193 8-729-216-22 s TRANSISTOR 2SA1162
 Q1194 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1195 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q1196 8-729-402-78 s TRANSISTOR XN6401
 Q1197 8-729-402-19 s TRANSISTOR XN6501
 Q1198 8-729-122-63 s TRANSISTOR 2SA1226
 Q1271 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1272 8-729-122-63 s TRANSISTOR 2SA1226

Q1273 8-729-122-63 s TRANSISTOR 2SA1226
 Q1274 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1276 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1277 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1381 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q1382 8-729-122-63 s TRANSISTOR 2SA1226
 Q1383 8-729-122-63 s TRANSISTOR 2SA1226
 Q1384 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1385 8-729-216-22 s TRANSISTOR 2SA1162
 Q1386 8-729-216-22 s TRANSISTOR 2SA1162

Q1387 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1388 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1389 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1390 8-729-122-63 s TRANSISTOR 2SA1226
 Q1391 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

Q1392 8-729-402-19 s TRANSISTOR XN6501
 Q1393 8-729-216-22 s TRANSISTOR 2SA1162
 Q1394 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q1395 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

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Ref. No. or Q'ty	Part No.	SP Description
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Q1396	8-729-402-78	s TRANSISTOR XN6401
Q1397	8-729-402-19	s TRANSISTOR XN6501
Q1398	8-729-122-63	s TRANSISTOR 2SA1226
Q1471	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1472	8-729-122-63	s TRANSISTOR 2SA1226

Q1473	8-729-122-63	s TRANSISTOR 2SA1226
Q1474	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1476	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1477	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1551	8-729-120-28	s TRANSISTOR 2SC1623-L5L6

Q1552	8-729-216-22	s TRANSISTOR 2SA1162
Q1553	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1554	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1556	8-729-216-22	s TRANSISTOR 2SA1162
Q1557	8-729-216-22	s TRANSISTOR 2SA1162

Q1558	8-729-216-22	s TRANSISTOR 2SA1162
Q1559	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1560	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1561	8-729-216-22	s TRANSISTOR 2SA1162
Q1562	8-729-120-28	s TRANSISTOR 2SC1623-L5L6

Q1781	8-729-101-07	s TRANSISTOR 2SB798
Q1782	8-729-807-51	s TRANSISTOR 2SD1623-S
Q1783	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1784	8-729-216-22	s TRANSISTOR 2SA1162
Q1785	8-729-120-28	s TRANSISTOR 2SC1623-L5L6

Q1786	8-729-216-22	s TRANSISTOR 2SA1162
Q1787	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1788	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1789	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1790	8-729-216-22	s TRANSISTOR 2SA1162

Q1991	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q1992	8-729-216-22	s TRANSISTOR 2SA1162
Q2031	8-729-216-22	s TRANSISTOR 2SA1162
Q2032	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q2033	8-729-120-28	s TRANSISTOR 2SC1623-L5L6

Q2034	8-729-122-63	s TRANSISTOR 2SA1226
Q2035	8-729-122-63	s TRANSISTOR 2SA1226
Q2131	8-729-216-22	s TRANSISTOR 2SA1162
Q2132	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q2133	8-729-120-28	s TRANSISTOR 2SC1623-L5L6

Q2134	8-729-122-63	s TRANSISTOR 2SA1226
Q2135	8-729-122-63	s TRANSISTOR 2SA1226
Q2231	8-729-216-22	s TRANSISTOR 2SA1162
Q2232	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q2233	8-729-120-28	s TRANSISTOR 2SC1623-L5L6

Q2234	8-729-122-63	s TRANSISTOR 2SA1226
Q2235	8-729-122-63	s TRANSISTOR 2SA1226
Q2541	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q2548	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q2571	8-729-105-68	s TRANSISTOR 2SC3356-K

Q2572	8-729-105-68	s TRANSISTOR 2SC3356-K
Q2581	8-729-105-68	s TRANSISTOR 2SC3356-K
Q2582	8-729-105-68	s TRANSISTOR 2SC3356-K
Q2771	8-729-122-63	s TRANSISTOR 2SA1226
Q3071	8-729-101-07	s TRANSISTOR 2SB798

Q3072	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3110	8-729-807-51	s TRANSISTOR 2SD1623-S
Q3211	8-729-216-22	s TRANSISTOR 2SA1162
Q3212	8-729-120-28	s TRANSISTOR 2SC1623-L5L6

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Ref. No. or Q'ty	Part No.	SP Description
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Q3213	8-729-122-63	s TRANSISTOR 2SA1226
Q3215	8-729-216-22	s TRANSISTOR 2SA1162
Q3216	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3217	8-729-216-22	s TRANSISTOR 2SA1162
Q3218	8-729-101-25	s TRANSISTOR 2SC1009A-FA4

Q3219	8-729-122-63	s TRANSISTOR 2SA1226
Q3220	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3221	8-729-122-63	s TRANSISTOR 2SA1226
Q3222	8-729-216-22	s TRANSISTOR 2SA1162
Q3223	8-729-120-28	s TRANSISTOR 2SC1623-L5L6

Q3224	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3225	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3226	8-729-216-22	s TRANSISTOR 2SA1162
Q3227	8-729-216-22	s TRANSISTOR 2SA1162
Q3228	8-729-039-89	s TRANSISTOR 2SC3082KT146Q

Q3229	8-729-216-22	s TRANSISTOR 2SA1162
Q3230	8-729-216-22	s TRANSISTOR 2SA1162
Q3231	8-729-039-89	s TRANSISTOR 2SC3082KT146Q
Q3232	8-729-216-22	s TRANSISTOR 2SA1162
Q3233	8-729-216-22	s TRANSISTOR 2SA1162

Q3234	8-729-026-31	s TRANSISTOR XP6435
Q3235	8-729-101-25	s TRANSISTOR 2SC1009A-FA4
Q3236	8-729-101-25	s TRANSISTOR 2SC1009A-FA4
Q3237	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3351	8-729-216-22	s TRANSISTOR 2SA1162

Q3352	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3354	8-729-101-25	s TRANSISTOR 2SC1009A-FA4
Q3355	8-729-216-22	s TRANSISTOR 2SA1162
Q3356	8-729-216-22	s TRANSISTOR 2SA1162
Q3357	8-729-122-63	s TRANSISTOR 2SA1226

Q3358	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3359	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3360	8-729-026-32	s TRANSISTOR XP6534
Q3361	8-729-101-25	s TRANSISTOR 2SC1009A-FA4
Q3362	8-729-122-63	s TRANSISTOR 2SA1226

Q3363	8-729-101-25	s TRANSISTOR 2SC1009A-FA4
Q3364	8-729-101-25	s TRANSISTOR 2SC1009A-FA4
Q3367	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3368	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3369	8-729-026-32	s TRANSISTOR XP6534

Q3370	8-729-216-22	s TRANSISTOR 2SA1162
Q3371	8-729-101-25	s TRANSISTOR 2SC1009A-FA4
Q3372	8-729-122-63	s TRANSISTOR 2SA1226
Q3373	8-729-101-25	s TRANSISTOR 2SC1009A-FA4
Q3374	8-729-122-63	s TRANSISTOR 2SA1226

Q3375	8-729-122-63	s TRANSISTOR 2SA1226
Q3376	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3377	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3378	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3379	8-729-026-31	s TRANSISTOR XP6435

Q3380	8-729-026-32	s TRANSISTOR XP6534
Q3381	8-729-026-31	s TRANSISTOR XP6435
Q3382	8-729-026-32	s TRANSISTOR XP6534
Q3383	8-729-122-63	s TRANSISTOR 2SA1226
Q3384	8-729-120-28	s TRANSISTOR 2SC1623-L5L6

Q3385	8-729-122-63	s TRANSISTOR 2SA1226
Q3386	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3387	8-729-120-28	s TRANSISTOR 2SC1623-L5L6
Q3541	8-729-216-22	s TRANSISTOR 2SA1162

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Ref. No.
or Q'ty Part No. SP Description

Q3542 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q3544 8-729-101-25 s TRANSISTOR 2SC1009A-FA4
 Q3545 8-729-216-22 s TRANSISTOR 2SA1162
 Q3546 8-729-216-22 s TRANSISTOR 2SA1162
 Q3547 8-729-122-63 s TRANSISTOR 2SA1226

Q3549 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q3550 8-729-026-32 s TRANSISTOR XP6534
 Q3551 8-729-101-25 s TRANSISTOR 2SC1009A-FA4
 Q3552 8-729-122-63 s TRANSISTOR 2SA1226
 Q3553 8-729-101-25 s TRANSISTOR 2SC1009A-FA4

Q3554 8-729-101-25 s TRANSISTOR 2SC1009A-FA4
 Q3557 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q3558 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q3559 8-729-026-32 s TRANSISTOR XP6534
 Q3560 8-729-216-22 s TRANSISTOR 2SA1162

Q3561 8-729-101-25 s TRANSISTOR 2SC1009A-FA4
 Q3562 8-729-122-63 s TRANSISTOR 2SA1226
 Q3563 8-729-101-25 s TRANSISTOR 2SC1009A-FA4
 Q3564 8-729-122-63 s TRANSISTOR 2SA1226
 Q3565 8-729-122-63 s TRANSISTOR 2SA1226

Q3566 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q3567 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q3568 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q3569 8-729-026-31 s TRANSISTOR XP6435
 Q3570 8-729-026-32 s TRANSISTOR XP6534

Q3571 8-729-026-31 s TRANSISTOR XP6435
 Q3572 8-729-026-32 s TRANSISTOR XP6534
 Q3573 8-729-122-63 s TRANSISTOR 2SA1226
 Q3574 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q3575 8-729-122-63 s TRANSISTOR 2SA1226

Q3576 8-729-120-28 s TRANSISTOR 2SC1623-L5L6
 Q3577 8-729-120-28 s TRANSISTOR 2SC1623-L5L6

R361 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R362 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R363 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R364 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W
 R365 1-216-049-91 s METAL, CHIP 1K 5% 1/10W

R366 1-216-099-00 s METAL, CHIP 120K 5% 1/10W
 R371 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R372 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R373 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R374 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W

R375 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R376 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R377 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R378 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R379 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W

R380 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R381 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R382 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R383 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R384 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W

R385 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W
 R386 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W
 R387 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R388 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R389 1-216-063-91 s METAL, CHIP 3.9K 5% 1/10W

R390 1-216-037-00 s METAL, CHIP 330 5% 1/10W

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Ref. No.
or Q'ty Part No. SP Description

R391 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R392 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
 R393 1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W
 R394 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R395 1-216-079-00 s METAL, CHIP 18K 5% 1/10W

R396 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
 R397 1-216-085-00 s METAL, CHIP 33K 5% 1/10W
 R399 1-218-776-11 s METAL, CHIP 1M 0.50% 1/10W
 R400 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
 R401 1-216-665-11 s METAL, CHIP 3.9K 0.5% 1/10W

R402 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R403 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R404 1-216-097-91 s METAL, CHIP 100K 5% 1/10W
 R405 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R406 1-216-097-91 s METAL, CHIP 100K 5% 1/10W

R407 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R408 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R409 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R410 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
 R411 1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W

R413 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R414 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
 R415 1-216-085-00 s METAL, CHIP 33K 5% 1/10W
 R416 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R417 1-216-073-00 s METAL, CHIP 10K 5% 1/10W

R418 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R419 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R420 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R421 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R423 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W

R424 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R425 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R426 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
 R427 1-216-063-91 s METAL, CHIP 3.9K 5% 1/10W
 R428 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W

R429 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R430 1-216-097-91 s METAL, CHIP 100K 5% 1/10W
 R431 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R432 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W
 R434 1-216-025-91 s METAL, CHIP 100 5% 1/10W

R435 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R436 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R437 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R438 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R439 1-216-073-00 s METAL, CHIP 10K 5% 1/10W

R442 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R461 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R462 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W
 R463 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W
 R464 1-216-099-00 s METAL, CHIP 120K 5% 1/10W

R471 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R472 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
 R473 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W
 R474 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W
 R475 1-216-025-91 s METAL, CHIP 100 5% 1/10W

R476 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R477 1-216-063-91 s METAL, CHIP 3.9K 5% 1/10W
 R478 1-216-037-00 s METAL, CHIP 330 5% 1/10W
 R479 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W

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Ref. No.
or Q'ty Part No. SP Description

R480 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W
 R481 1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W
 R482 1-216-655-11 s METAL, CHIP 1.5K 0.5% 1/10W
 R484 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
 R486 1-216-085-00 s METAL, CHIP 33K 5% 1/10W

R488 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R489 1-218-776-11 s METAL, CHIP 1M 0.50% 1/10W
 R490 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R491 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W
 R494 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W

R495 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R496 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
 R497 1-216-063-91 s METAL, CHIP 3.9K 5% 1/10W
 R498 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R499 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W

R500 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W
 R501 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W
 R502 1-216-109-00 s METAL, CHIP 330K 5% 1/10W
 R531 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R532 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W

R533 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R534 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W
 R535 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R536 1-216-099-00 s METAL, CHIP 120K 5% 1/10W
 R541 1-216-073-00 s METAL, CHIP 10K 5% 1/10W

R542 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R543 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R544 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R545 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R546 1-216-073-00 s METAL, CHIP 10K 5% 1/10W

R547 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R548 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R549 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R550 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R551 1-216-073-00 s METAL, CHIP 10K 5% 1/10W

R552 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R553 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R554 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R555 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R556 1-216-073-00 s METAL, CHIP 10K 5% 1/10W

R581 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W
 R582 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R583 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W
 R584 1-216-099-00 s METAL, CHIP 120K 5% 1/10W
 R591 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W

R592 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R593 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R594 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R595 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R596 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W

R597 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R598 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R599 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R600 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R601 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W

R602 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R603 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R604 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
 R605 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W

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Ref. No.
or Q'ty Part No. SP Description

R606 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W
 R607 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R608 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R609 1-216-063-91 s METAL, CHIP 3.9K 5% 1/10W
 R610 1-216-037-00 s METAL, CHIP 330 5% 1/10W

R611 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R612 1-216-041-00 s METAL, CHIP 470 5% 1/10W
 R613 1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W
 R614 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R615 1-216-079-00 s METAL, CHIP 18K 5% 1/10W

R616 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
 R617 1-216-085-00 s METAL, CHIP 33K 5% 1/10W
 R619 1-218-776-11 s METAL, CHIP 1M 0.50% 1/10W
 R620 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
 R621 1-216-665-11 s METAL, CHIP 3.9K 0.5% 1/10W

R622 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R623 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R624 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R625 1-216-097-91 s METAL, CHIP 100K 5% 1/10W
 R626 1-216-097-91 s METAL, CHIP 100K 5% 1/10W

R627 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R628 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R629 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R630 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
 R631 1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W

R633 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R634 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
 R635 1-216-085-00 s METAL, CHIP 33K 5% 1/10W
 R636 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R637 1-216-073-00 s METAL, CHIP 10K 5% 1/10W

R638 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R639 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R640 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R641 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R643 1-216-647-11 s METAL, CHIP 680 0.5% 1/10W

R644 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R645 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R646 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
 R647 1-216-063-91 s METAL, CHIP 3.9K 5% 1/10W
 R648 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W

R649 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R650 1-216-097-91 s METAL, CHIP 100K 5% 1/10W
 R651 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R652 1-216-671-11 s METAL, CHIP 6.8K 0.50% 1/10W
 R654 1-216-025-91 s METAL, CHIP 100 5% 1/10W

R655 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R656 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R657 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R658 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R659 1-216-073-00 s METAL, CHIP 10K 5% 1/10W

R662 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R681 1-216-073-00 s METAL, CHIP 10K 5% 1/10W
 R682 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
 R683 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W
 R684 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W

R685 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R686 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R687 1-216-063-91 s METAL, CHIP 3.9K 5% 1/10W
 R688 1-216-037-00 s METAL, CHIP 330 5% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
R689	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R690	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R691	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R692	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R694	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R696	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R698	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R699	1-216-776-11	s METAL, CHIP 1M 0.50% 1/10W
R700	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R701	1-216-647-11	s METAL, CHIP 680 0.5% 1/10W
R704	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R705	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R706	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R707	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R708	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
R709	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R710	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R711	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R712	1-216-109-00	s METAL, CHIP 330K 5% 1/10W
R741	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R742	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R743	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R744	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R745	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R746	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R747	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R748	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R750	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R751	1-216-664-11	s METAL, CHIP 3.6K 0.50% 1/10W
R753	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R761	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R762	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R763	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R764	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R765	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R766	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R767	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R768	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R770	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R771	1-216-664-11	s METAL, CHIP 3.6K 0.50% 1/10W
R773	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R781	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R782	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R783	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R784	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R785	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R786	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R787	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R788	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R790	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R791	1-216-664-11	s METAL, CHIP 3.6K 0.50% 1/10W
R793	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R821	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R822	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R823	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R824	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R825	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R826	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R827	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
R828	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R829	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R830	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R831	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R832	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R833	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R834	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R835	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R836	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R837	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R838	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R839	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R840	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R841	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R842	1-216-041-00	s METAL, CHIP 470 5% 1/10W
R843	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R844	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R845	1-216-079-00	s METAL, CHIP 18K 5% 1/10W
R846	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R847	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R849	1-218-776-11	s METAL, CHIP 1M 0.50% 1/10W
R850	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R851	1-216-665-11	s METAL, CHIP 3.9K 0.5% 1/10W
R852	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R853	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R854	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R855	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R856	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R857	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R858	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R859	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R860	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R861	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R863	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R864	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R865	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R866	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R867	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R868	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R869	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R870	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R871	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R873	1-216-647-11	s METAL, CHIP 680 0.5% 1/10W
R874	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R875	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R876	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R877	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R878	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
R879	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R880	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R881	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R882	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R884	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R885	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R886	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R887	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R888	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R889	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R892	1-216-025-91	s METAL, CHIP 100 5% 1/10W

(AD-117 BOARD)

Ref. No. or Q'ty	Part No.	SP Description
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R911	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R912	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R913	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R914	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R915	1-216-025-91	s METAL, CHIP 100 5% 1/10W

R916	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R917	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R918	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R919	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R920	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W

R921	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R922	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R924	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R926	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R928	1-216-049-91	s METAL, CHIP 1K 5% 1/10W

R929	1-218-776-11	s METAL, CHIP 1M 0.50% 1/10W
R930	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R931	1-216-647-11	s METAL, CHIP 680 0.5% 1/10W
R934	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R935	1-216-025-91	s METAL, CHIP 100 5% 1/10W

R936	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R937	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R938	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R939	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
R940	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W

R941	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R942	1-216-109-00	s METAL, CHIP 330K 5% 1/10W
R971	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R972	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R973	1-216-073-00	s METAL, CHIP 10K 5% 1/10W

R974	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R975	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R976	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R977	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R978	1-216-073-00	s METAL, CHIP 10K 5% 1/10W

R979	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R980	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R981	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R982	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R983	1-216-025-91	s METAL, CHIP 100 5% 1/10W

R984	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R985	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R986	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1021	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1022	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W

R1023	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1024	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1025	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1026	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1027	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W

R1028	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1029	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1030	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1031	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1032	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W

R1033	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1034	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R1035	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R1036	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
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R1037	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1038	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1039	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1040	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R1041	1-216-073-00	s METAL, CHIP 10K 5% 1/10W

R1042	1-216-041-00	s METAL, CHIP 470 5% 1/10W
R1043	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R1044	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1045	1-216-079-00	s METAL, CHIP 18K 5% 1/10W
R1046	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W

R1047	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1049	1-218-776-11	s METAL, CHIP 1M 0.50% 1/10W
R1050	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1051	1-216-665-11	s METAL, CHIP 3.9K 0.5% 1/10W
R1052	1-216-073-00	s METAL, CHIP 10K 5% 1/10W

R1053	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1054	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1055	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1056	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1057	1-216-025-91	s METAL, CHIP 100 5% 1/10W

R1058	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1059	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1060	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1061	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R1063	1-216-025-91	s METAL, CHIP 100 5% 1/10W

R1064	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R1065	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1066	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1067	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1068	1-216-025-91	s METAL, CHIP 100 5% 1/10W

R1069	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1070	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1071	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1073	1-216-647-11	s METAL, CHIP 680 0.5% 1/10W
R1074	1-216-025-91	s METAL, CHIP 100 5% 1/10W

R1075	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1076	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R1077	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1078	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
R1079	1-216-073-00	s METAL, CHIP 10K 5% 1/10W

R1080	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1081	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1082	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R1084	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1085	1-216-073-00	s METAL, CHIP 10K 5% 1/10W

R1086	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1087	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1088	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1089	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1092	1-216-025-91	s METAL, CHIP 100 5% 1/10W

R1111	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1112	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R1113	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R1114	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R1115	1-216-025-91	s METAL, CHIP 100 5% 1/10W

R1116	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1117	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1118	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R1119	1-216-073-00	s METAL, CHIP 10K 5% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
R1120	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R1121	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R1122	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R1124	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R1126	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1128	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1129	1-218-776-11	s METAL, CHIP 1M 0.50% 1/10W
R1130	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1131	1-216-647-11	s METAL, CHIP 680 0.5% 1/10W
R1134	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1135	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1136	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1137	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1138	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
R1139	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1140	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R1141	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R1142	1-216-109-00	s METAL, CHIP 330K 5% 1/10W
R1181	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1182	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1183	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1184	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1185	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1186	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1187	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1188	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1189	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1190	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1191	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1192	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1193	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1194	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R1195	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R1196	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R1197	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1198	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1199	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1200	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R1201	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1202	1-216-041-00	s METAL, CHIP 470 5% 1/10W
R1203	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R1204	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1205	1-216-079-00	s METAL, CHIP 18K 5% 1/10W
R1206	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R1207	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1209	1-218-776-11	s METAL, CHIP 1M 0.50% 1/10W
R1210	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1211	1-216-665-11	s METAL, CHIP 3.9K 0.5% 1/10W
R1212	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1213	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1214	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1215	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1216	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1217	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1218	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1219	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1220	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1221	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R1223	1-216-025-91	s METAL, CHIP 100 5% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
R1224	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R1225	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1226	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1227	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1228	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1229	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1230	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1231	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1233	1-216-647-11	s METAL, CHIP 680 0.5% 1/10W
R1234	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1235	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1236	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R1237	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1238	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
R1239	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1240	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1241	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1242	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R1244	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1245	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1246	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1247	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1248	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1249	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1252	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1271	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1272	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R1273	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R1274	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R1275	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1276	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1277	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1278	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R1279	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1280	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R1281	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R1282	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R1284	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R1286	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1288	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1289	1-218-776-11	s METAL, CHIP 1M 0.50% 1/10W
R1290	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1291	1-216-647-11	s METAL, CHIP 680 0.5% 1/10W
R1294	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1295	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1296	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1297	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1298	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1299	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
R1300	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R1301	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R1302	1-216-109-00	s METAL, CHIP 330K 5% 1/10W
R1331	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1332	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1333	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1334	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1335	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1336	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1337	1-216-025-91	s METAL, CHIP 100 5% 1/10W

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Ref. No.
or Q'ty Part No. SP Description

R1338	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1339	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1340	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1341	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1342	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1343	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1344	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1345	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1346	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1381	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1382	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1383	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1384	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1385	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1386	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1387	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1388	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1389	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1390	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1391	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1392	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1393	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1394	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R1395	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R1396	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R1397	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1398	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1399	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1400	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R1401	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1402	1-216-041-00	s METAL, CHIP 470 5% 1/10W
R1403	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R1404	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1405	1-216-079-00	s METAL, CHIP 18K 5% 1/10W
R1406	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R1407	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1409	1-218-776-11	s METAL, CHIP 1M 0.50% 1/10W
R1410	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1411	1-216-665-11	s METAL, CHIP 3.9K 0.5% 1/10W
R1412	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1413	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1414	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1415	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1416	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1417	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1418	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1419	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1420	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1421	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R1423	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1424	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R1425	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1426	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1427	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1428	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1429	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1430	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1431	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1433	1-216-647-11	s METAL, CHIP 680 0.5% 1/10W

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Ref. No.
or Q'ty Part No. SP Description

R1434	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1435	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1436	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R1437	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1438	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
R1439	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1440	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1441	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1442	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R1444	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1445	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1446	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1447	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1448	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1449	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1452	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1471	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1472	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R1473	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R1474	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R1475	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1476	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1477	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1478	1-216-037-00	s METAL, CHIP 330 5% 1/10W
R1479	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1480	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R1481	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R1482	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R1486	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R1488	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1489	1-218-776-11	s METAL, CHIP 1M 0.50% 1/10W
R1490	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1491	1-216-647-11	s METAL, CHIP 680 0.5% 1/10W
R1494	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1495	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1496	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1497	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1498	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
R1499	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1500	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R1501	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R1502	1-216-109-00	s METAL, CHIP 330K 5% 1/10W
R1519	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R1520	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R1521	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R1522	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R1523	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R1524	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R1525	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R1526	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R1551	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1552	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1553	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1556	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R1557	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1558	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1559	1-216-121-91	s METAL, CHIP 1M 5% 1/10W
R1560	1-216-049-91	s METAL, CHIP 1K 5% 1/10W

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R1561	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R1562	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1563	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1564	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1566	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1567	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1568	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1569	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R1571	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1572	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R1573	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1574	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1575	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1576	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1578	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1579	1-216-665-11	s METAL, CHIP 3.9K 0.5% 1/10W
R1580	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1581	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1582	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1583	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1584	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1585	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R1586	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R1616	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1618	1-216-685-11	s METAL, CHIP 27K 0.5% 1/10W
R1620	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1621	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1622	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1623	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1624	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1626	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1627	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1628	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1629	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1630	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1631	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R1632	1-216-689-11	s METAL, CHIP 39K 0.5% 1/10W
R1633	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1661	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1662	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1663	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1664	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1665	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1666	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1667	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1668	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1669	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1670	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1671	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1672	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1677	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1678	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1679	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1680	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1681	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1682	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1683	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1684	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1685	1-216-049-91	s METAL, CHIP 1K 5% 1/10W

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Ref. No.
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R1686	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1687	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1690	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1691	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1692	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1694	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1695	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1696	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1697	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1698	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1699	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1700	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1701	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1702	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1706	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1707	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1708	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1709	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1710	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1711	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1712	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1713	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1714	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1715	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1716	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1717	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1718	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1719	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1720	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1721	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1722	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1723	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1724	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1725	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1761	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1762	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R1781	1-216-009-00	s METAL, CHIP 22 5% 1/10W
R1782	1-216-009-00	s METAL, CHIP 22 5% 1/10W
R1783	1-216-009-00	s METAL, CHIP 22 5% 1/10W
R1784	1-216-009-00	s METAL, CHIP 22 5% 1/10W
R1785	1-216-009-00	s METAL, CHIP 22 5% 1/10W
R1786	1-216-009-00	s METAL, CHIP 22 5% 1/10W
R1787	1-216-009-00	s METAL, CHIP 22 5% 1/10W
R1788	1-216-009-00	s METAL, CHIP 22 5% 1/10W
R1789	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R1790	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R1791	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R1792	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R1793	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R1794	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1795	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R1796	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R1797	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R1798	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R1799	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R1800	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R1801	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R1802	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1803	1-216-095-00	s METAL, CHIP 82K 5% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
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R1804	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1805	1-216-089-91	s METAL 47K 5% 1/10W
R1806	1-216-095-00	s METAL, CHIP 82K 5% 1/10W
R1807	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1808	1-216-097-91	s METAL, CHIP 100K 5% 1/10W

R1809	1-216-103-00	s METAL, CHIP 180K 5% 1/10W
R1810	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1811	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1812	1-216-073-00	s METAL, CHIP 10K 5% 1/10W
R1813	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W

R1814	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R1815	1-216-089-91	s METAL 47K 5% 1/10W
R1816	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R1817	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1819	1-216-059-00	s METAL, CHIP 2.7K 5% 1/10W

R1821	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1822	1-216-081-00	s METAL, CHIP 22K 5% 1/10W
R1823	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1824	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R1825	1-216-081-00	s METAL, CHIP 22K 5% 1/10W

R1826	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1827	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1828	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1830	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R1831	1-216-025-91	s METAL, CHIP 100 5% 1/10W

R1991	1-216-669-11	s METAL, CHIP 5.6K 0.5% 1/10W
R1992	1-216-669-11	s METAL, CHIP 5.6K 0.5% 1/10W
R1993	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R1994	1-216-674-11	s METAL, CHIP 9.1K 0.5% 1/10W
R1997	1-216-635-11	s METAL, CHIP 220 0.5% 1/10W

R1998	1-216-635-11	s METAL, CHIP 220 0.5% 1/10W
R2000	1-216-619-11	s METAL, CHIP 47 0.50% 1/10W
R2003	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R2004	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R2005	1-216-049-91	s METAL, CHIP 1K 5% 1/10W

R2006	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R2007	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R2008	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R2031	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2032	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W

R2033	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2034	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R2035	1-216-295-00	s METAL, CHIP 0 1/10W
R2036	1-216-682-11	s METAL, CHIP 20K 0.5% 1/10W
R2037	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W

R2038	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R2039	1-216-619-11	s METAL, CHIP 47 0.50% 1/10W
R2040	1-216-673-11	s METAL, CHIP 8.2K 0.5% 1/10W
R2041	1-216-695-11	s METAL, CHIP 68K 0.50% 1/10W
R2042	1-216-631-11	s METAL 150 0.50% 1/10W

R2043	1-216-631-11	s METAL 150 0.50% 1/10W
R2044	1-218-760-11	s METAL, CHIP 220K 0.50% 1/10W
R2045	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2046	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2047	1-216-691-11	s METAL, CHIP 47K 0.50% 1/10W

R2048	1-216-603-11	s METAL, CHIP 10 0.50% 1/10W
R2049	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2050	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R2051	1-216-619-11	s METAL, CHIP 47 0.50% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
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R2052	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2053	1-216-603-11	s METAL, CHIP 10 0.50% 1/10W
R2054	1-216-691-11	s METAL, CHIP 47K 0.50% 1/10W
R2055	1-216-603-11	s METAL, CHIP 10 0.50% 1/10W
R2058	1-218-760-11	s METAL, CHIP 220K 0.50% 1/10W

R2059	1-218-760-11	s METAL, CHIP 220K 0.50% 1/10W
R2060	1-216-687-11	s METAL, CHIP 33K 0.5% 1/10W
R2061	1-216-668-11	s METAL, CHIP 5.1K 0.5% 1/10W
R2062	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2063	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W

R2064	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2065	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2066	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2067	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2068	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W

R2069	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2070	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2071	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2072	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2073	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W

R2074	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R2075	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R2076	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R2077	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R2079	1-216-049-91	s METAL, CHIP 1K 5% 1/10W

R2080	1-216-672-11	s METAL, CHIP 7.5K 0.5% 1/10W
R2081	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2082	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2083	1-216-059-00	s METAL, CHIP 2.7K 5% 1/10W
R2084	1-216-027-00	s METAL, CHIP 120 5% 1/10W

R2085	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2086	1-216-645-11	s METAL, CHIP 560 0.50% 1/10W
R2087	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R2088	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R2089	1-216-295-00	s METAL, CHIP 0 1/10W

R2090	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R2091	1-216-105-91	s METAL, CHIP 220K 5% 1/10W
R2131	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2132	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R2133	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W

R2134	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R2135	1-216-295-00	s METAL, CHIP 0 1/10W
R2136	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R2137	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R2138	1-216-650-11	s METAL, CHIP 910 0.50% 1/10W

R2139	1-216-619-11	s METAL, CHIP 47 0.50% 1/10W
R2140	1-216-673-11	s METAL, CHIP 8.2K 0.5% 1/10W
R2141	1-216-695-11	s METAL, CHIP 68K 0.50% 1/10W
R2142	1-215-401-11	s METAL 150 1% 1/6W
R2143	1-216-631-11	s METAL 150 0.50% 1/10W

R2144	1-218-760-11	s METAL, CHIP 220K 0.50% 1/10W
R2145	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2146	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2147	1-216-691-11	s METAL, CHIP 47K 0.50% 1/10W
R2148	1-216-603-11	s METAL, CHIP 10 0.50% 1/10W

R2149	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2150	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R2151	1-216-619-11	s METAL, CHIP 47 0.50% 1/10W
R2152	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W

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R2153 1-216-603-11 s METAL, CHIP 10 0.50% 1/10W
 R2154 1-216-691-11 s METAL, CHIP 47K 0.50% 1/10W
 R2155 1-216-603-11 s METAL, CHIP 10 0.50% 1/10W
 R2158 1-218-760-11 s METAL, CHIP 220K 0.50% 1/10W
 R2159 1-218-760-11 s METAL, CHIP 220K 0.50% 1/10W

R2160 1-216-683-11 s METAL, CHIP 22K 0.50% 1/10W
 R2161 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R2162 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2163 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2164 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W

R2165 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2166 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2167 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2168 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2169 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W

R2170 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2171 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2172 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W
 R2173 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W
 R2174 1-216-027-00 s METAL, CHIP 120 5% 1/10W

R2175 1-216-097-91 s METAL, CHIP 100K 5% 1/10W
 R2176 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R2178 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R2179 1-216-672-11 s METAL, CHIP 7.5K 0.5% 1/10W
 R2180 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W

R2181 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R2182 1-216-059-00 s METAL, CHIP 2.7K 5% 1/10W
 R2183 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R2184 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R2185 1-216-645-11 s METAL 560 0.50% 1/10W

R2186 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R2187 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R2188 1-216-295-00 s METAL, CHIP 0 1/10W
 R2189 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W
 R2190 1-216-105-91 s METAL, CHIP 220K 5% 1/10W

R2231 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R2232 1-216-627-11 s METAL, CHIP 100 0.50% 1/10W
 R2233 1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W
 R2234 1-216-667-11 s METAL, CHIP 4.7K 0.5% 1/10W
 R2235 1-216-683-11 s METAL, CHIP 22K 0.50% 1/10W

R2236 1-216-295-00 s METAL, CHIP 0 1/10W
 R2237 1-216-683-11 s METAL, CHIP 22K 0.50% 1/10W
 R2238 1-216-650-11 s METAL, CHIP 910 0.50% 1/10W
 R2239 1-216-619-11 s METAL, CHIP 47 0.50% 1/10W
 R2240 1-216-673-11 s METAL, CHIP 8.2K 0.5% 1/10W

R2241 1-216-695-11 s METAL, CHIP 68K 0.50% 1/10W
 R2242 1-215-401-11 s METAL 150 1% 1/6W
 R2243 1-216-631-11 s METAL 150 0.50% 1/10W
 R2244 1-218-760-11 s METAL, CHIP 220K 0.50% 1/10W
 R2245 1-216-627-11 s METAL, CHIP 100 0.50% 1/10W

R2246 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2247 1-216-691-11 s METAL, CHIP 47K 0.50% 1/10W
 R2248 1-216-603-11 s METAL, CHIP 10 0.50% 1/10W
 R2249 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R2250 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W

R2251 1-216-619-11 s METAL, CHIP 47 0.50% 1/10W
 R2252 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2253 1-216-603-11 s METAL, CHIP 10 0.50% 1/10W
 R2254 1-216-691-11 s METAL, CHIP 47K 0.50% 1/10W

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R2255 1-216-603-11 s METAL, CHIP 10 0.50% 1/10W
 R2258 1-218-760-11 s METAL, CHIP 220K 0.50% 1/10W
 R2259 1-218-760-11 s METAL, CHIP 220K 0.50% 1/10W
 R2260 1-216-683-11 s METAL, CHIP 22K 0.50% 1/10W
 R2261 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W

R2262 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2263 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2264 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2265 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2266 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W

R2267 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2268 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2269 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2270 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2271 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W

R2272 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W
 R2273 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W
 R2274 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R2275 1-216-097-91 s METAL, CHIP 100K 5% 1/10W
 R2276 1-216-027-00 s METAL, CHIP 120 5% 1/10W

R2278 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R2279 1-216-672-11 s METAL, CHIP 7.5K 0.5% 1/10W
 R2280 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R2281 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R2282 1-216-059-00 s METAL, CHIP 2.7K 5% 1/10W

R2283 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R2284 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R2285 1-216-645-11 s METAL 560 0.50% 1/10W
 R2286 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R2287 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W

R2288 1-216-295-00 s METAL, CHIP 0 1/10W
 R2289 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W
 R2290 1-216-105-91 s METAL, CHIP 220K 5% 1/10W
 R2291 1-216-295-00 s METAL, CHIP 0 1/10W
 R2292 1-216-295-00 s METAL, CHIP 0 1/10W

R2361 1-216-009-00 s METAL, CHIP 22 5% 1/10W
 R2362 1-216-009-00 s METAL, CHIP 22 5% 1/10W
 R2363 1-216-009-00 s METAL, CHIP 22 5% 1/10W
 R2364 1-216-009-00 s METAL, CHIP 22 5% 1/10W
 R2365 1-216-699-11 s METAL, CHIP 100K 0.50% 1/10W

R2366 1-216-699-11 s METAL, CHIP 100K 0.50% 1/10W
 R2367 1-216-699-11 s METAL, CHIP 100K 0.50% 1/10W
 R2368 1-216-699-11 s METAL, CHIP 100K 0.50% 1/10W
 R2369 1-216-699-11 s METAL, CHIP 100K 0.50% 1/10W
 R2370 1-216-699-11 s METAL, CHIP 100K 0.50% 1/10W

R2381 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2382 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2440 1-216-009-00 s METAL, CHIP 22 5% 1/10W
 R2442 1-216-691-11 s METAL, CHIP 47K 0.50% 1/10W
 R2443 1-216-691-11 s METAL, CHIP 47K 0.50% 1/10W

R2444 1-216-691-11 s METAL, CHIP 47K 0.50% 1/10W
 R2445 1-216-691-11 s METAL, CHIP 47K 0.50% 1/10W
 R2446 1-216-691-11 s METAL, CHIP 47K 0.50% 1/10W
 R2447 1-216-699-11 s METAL, CHIP 100K 0.50% 1/10W
 R2448 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W

R2449 1-218-760-11 s METAL, CHIP 220K 0.50% 1/10W
 R2450 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W
 R2451 1-218-760-11 s METAL, CHIP 220K 0.50% 1/10W
 R2453 1-216-611-11 s METAL, CHIP 22 0.50% 1/10W

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R2454	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2455	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2456	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2457	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2458	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2459	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2460	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2461	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2462	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2463	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2464	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2465	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2466	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2467	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2468	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2469	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2470	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2471	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2472	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2473	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2474	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2475	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2476	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2477	1-218-760-11	s METAL, CHIP 220K 0.50% 1/10W
R2478	1-218-760-11	s METAL, CHIP 220K 0.50% 1/10W
R2490	1-216-691-11	s METAL, CHIP 47K 0.50% 1/10W
R2491	1-216-691-11	s METAL, CHIP 47K 0.50% 1/10W
R2492	1-216-691-11	s METAL, CHIP 47K 0.50% 1/10W
R2493	1-216-691-11	s METAL, CHIP 47K 0.50% 1/10W
R2511	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R2512	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R2513	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R2514	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R2515	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R2516	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R2517	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R2518	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R2527	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R2528	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R2529	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R2530	1-216-029-00	s METAL, CHIP 150 5% 1/10W
R2541	1-216-631-11	s METAL 150 0.50% 1/10W
R2542	1-216-631-11	s METAL 150 0.50% 1/10W
R2543	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2544	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R2545	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R2546	1-216-653-11	s METAL, CHIP 1.2K 0.50% 1/10W
R2547	1-216-694-11	s METAL, CHIP 62K 0.50% 1/10W
R2548	1-216-684-11	s METAL, CHIP 24K 0.50% 1/10W
R2571	1-216-635-11	s METAL, CHIP 220 0.5% 1/10W
R2572	1-216-635-11	s METAL, CHIP 220 0.5% 1/10W
R2573	1-216-625-11	s METAL, CHIP 82 0.5% 1/10W
R2574	1-216-615-11	s METAL 33 0.50% 1/10W
R2575	1-216-615-11	s METAL 33 0.50% 1/10W
R2576	1-216-624-11	s METAL 75 0.50% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
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R2581	1-216-625-11	s METAL, CHIP 82 0.5% 1/10W
R2582	1-216-615-11	s METAL 33 0.50% 1/10W
R2583	1-216-615-11	s METAL 33 0.50% 1/10W
R2584	1-216-624-11	s METAL 75 0.50% 1/10W
R2585	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R2586	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2587	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2588	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2598	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R2691	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2692	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2693	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2694	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2696	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2697	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2698	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2699	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2700	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2701	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2702	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2703	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2704	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2706	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2708	1-216-619-11	s METAL, CHIP 47 0.50% 1/10W
R2709	1-216-619-11	s METAL, CHIP 47 0.50% 1/10W
R2710	1-216-619-11	s METAL, CHIP 47 0.50% 1/10W
R2711	1-216-699-11	s METAL, CHIP 100K 0.50% 1/10W
R2712	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2714	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R2715	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R2741	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R2742	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R2743	1-216-665-11	s METAL, CHIP 3.9K 0.5% 1/10W
R2744	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R2745	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2746	1-216-670-11	s METAL 6.2K 0.50% 1/10W
R2747	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W
R2748	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R2771	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R2772	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R2773	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2774	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R2775	1-216-679-11	s METAL, CHIP 15K 0.5% 1/10W
R2776	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R2777	1-218-764-11	s METAL, CHIP 330K 0.50% 1/10W
R2778	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2779	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2780	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2781	1-216-671-11	s METAL, CHIP 6.8K 0.50% 1/10W
R2782	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R2783	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R2784	1-216-670-11	s METAL 6.2K 0.50% 1/10W
R2801	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R2802	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W
R2803	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R2804	1-216-691-11	s METAL, CHIP 47K 0.50% 1/10W
R2805	1-216-691-11	s METAL, CHIP 47K 0.50% 1/10W
R2806	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R2807	1-216-667-11	s METAL, CHIP 4.7K 0.5% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
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R2808	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2809	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2810	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R2811	1-216-611-11	s METAL, CHIP 22 0.50% 1/10W
R2951	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R2952	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R2953	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R2961	1-216-699-11	s METAL, CHIP 100K 0.50% 1/10W
R2962	1-216-699-11	s METAL, CHIP 100K 0.50% 1/10W
R2963	1-216-699-11	s METAL, CHIP 100K 0.50% 1/10W
R2964	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R2965	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R2981	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2982	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2983	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2984	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2985	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2986	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2987	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2988	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2989	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2990	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2991	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2992	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2993	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2994	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2995	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2996	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R2997	1-216-699-11	s METAL, CHIP 100K 0.50% 1/10W
R2998	1-216-699-11	s METAL, CHIP 100K 0.50% 1/10W
R2999	1-216-699-11	s METAL, CHIP 100K 0.50% 1/10W
R3000	1-216-699-11	s METAL, CHIP 100K 0.50% 1/10W
R3001	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3072	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R3073	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R3075	1-216-682-11	s METAL, CHIP 20K 0.5% 1/10W
R3076	1-216-683-11	s METAL, CHIP 22K 0.50% 1/10W
R3077	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3078	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R3079	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R3080	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R3081	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R3082	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R3111	1-216-691-11	s METAL, CHIP 47K 0.50% 1/10W
R3112	1-216-691-11	s METAL, CHIP 47K 0.50% 1/10W
R3113	1-216-095-00	s METAL, CHIP 82K 5% 1/10W
R3211	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R3213	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3214	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3215	1-216-041-00	s METAL, CHIP 470 5% 1/10W
R3216	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3217	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3218	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R3219	1-216-077-00	s METAL, CHIP 15K 5% 1/10W
R3220	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R3221	1-216-099-00	s METAL, CHIP 120K 5% 1/10W
R3222	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R3223	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R3224	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
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R3225	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3228	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R3229	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3230	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3232	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R3233	1-216-097-91	s METAL, CHIP 100K 5% 1/10W
R3235	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R3238	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3240	1-216-055-00	s METAL, CHIP 1.8K 5% 1/10W
R3241	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3242	1-216-055-00	s METAL, CHIP 1.8K 5% 1/10W
R3246	1-218-762-11	s METAL, CHIP 270K 0.50% 1/10W
R3247	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R3248	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R3249	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3250	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
R3251	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R3252	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W
R3253	1-216-644-11	s METAL, CHIP 510 0.5% 1/10W
R3256	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R3257	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3258	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3259	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3260	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3261	1-216-639-11	s METAL, CHIP 330 0.5% 1/10W
R3262	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R3265	1-216-660-11	s METAL, CHIP 2.4K 0.50% 1/10W
R3269	1-216-639-11	s METAL, CHIP 330 0.5% 1/10W
R3270	1-216-674-11	s METAL, CHIP 9.1K 0.5% 1/10W
R3271	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R3272	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3273	1-216-071-00	s METAL, CHIP 8.2K 5% 1/10W
R3274	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3275	1-216-689-11	s METAL, CHIP 39K 0.5% 1/10W
R3276	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R3282	1-216-699-11	s METAL, CHIP 100K 0.50% 1/10W
R3283	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3284	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3285	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3286	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3287	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R3288	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R3290	1-216-692-11	s METAL, CHIP 51K 0.50% 1/10W
R3291	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R3293	1-216-059-00	s METAL, CHIP 2.7K 5% 1/10W
R3294	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3295	1-216-041-00	s METAL, CHIP 470 5% 1/10W
R3296	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R3297	1-216-657-11	s METAL, CHIP 1.8K 0.5% 1/10W
R3298	1-216-041-00	s METAL, CHIP 470 5% 1/10W
R3299	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3300	1-216-053-00	s METAL, CHIP 1.5K 5% 1/10W
R3301	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3302	1-216-041-00	s METAL, CHIP 470 5% 1/10W
R3303	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3304	1-216-059-00	s METAL, CHIP 2.7K 5% 1/10W
R3305	1-216-311-00	s METAL, CHIP 6.8 5% 1/10W
R3306	1-216-668-11	s METAL, CHIP 5.1K 0.5% 1/10W
R3307	1-216-668-11	s METAL, CHIP 5.1K 0.5% 1/10W

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Ref. No.
or Q'ty Part No. SP Description

R3308 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3310 1-216-671-11 s METAL, CHIP 6.8K 0.50% 1/10W
 R3311 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R3317 1-216-683-11 s METAL, CHIP 22K 0.50% 1/10W
 R3318 1-216-683-11 s METAL, CHIP 22K 0.50% 1/10W

R3319 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W
 R3320 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W
 R3321 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
 R3322 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3323 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W

R3351 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R3353 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R3354 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3355 1-216-041-00 s METAL, CHIP 470 5% 1/10W
 R3356 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W

R3357 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3358 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
 R3359 1-216-077-00 s METAL, CHIP 15K 5% 1/10W
 R3360 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
 R3361 1-216-099-00 s METAL, CHIP 120K 5% 1/10W

R3362 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R3363 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R3364 1-216-627-11 s METAL, CHIP 100 0.50% 1/10W
 R3365 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R3368 1-216-085-00 s METAL, CHIP 33K 5% 1/10W

R3369 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3370 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R3371 1-216-654-11 s METAL, CHIP 1.3K 0.5% 1/10W
 R3372 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R3373 1-216-654-11 s METAL, CHIP 1.3K 0.5% 1/10W

R3377 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
 R3378 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3380 1-216-055-00 s METAL, CHIP 1.8K 5% 1/10W
 R3381 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3382 1-216-055-00 s METAL, CHIP 1.8K 5% 1/10W

R3383 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
 R3384 1-216-295-00 s METAL, CHIP 0 1/10W
 R3387 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
 R3388 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
 R3389 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W

R3390 1-216-643-11 s METAL, CHIP 470 0.5% 1/10W
 R3391 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
 R3392 1-216-658-11 s METAL, CHIP 2K 0.5% 1/10W
 R3393 1-216-644-11 s METAL, CHIP 510 0.5% 1/10W
 R3394 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W

R3395 1-216-654-11 s METAL, CHIP 1.3K 0.5% 1/10W
 R3396 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3397 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R3398 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R3399 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W

R3400 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
 R3401 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3402 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3403 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3404 1-216-659-11 s METAL, CHIP 2.2K 0.5% 1/10W

R3405 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3406 1-216-655-11 s METAL, CHIP 1.5K 0.50% 1/10W
 R3407 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3408 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W

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Ref. No.
or Q'ty Part No. SP Description

R3409 1-216-615-11 s METAL 33 0.50% 1/10W
 R3410 1-216-627-11 s METAL, CHIP 100 0.50% 1/10W
 R3411 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W
 R3412 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3414 1-216-069-00 s METAL, CHIP 6.8K 5% 1/10W

R3420 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W
 R3421 1-216-654-11 s METAL, CHIP 1.3K 0.5% 1/10W
 R3422 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3423 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R3424 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W

R3425 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
 R3426 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
 R3427 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3428 1-216-057-00 s METAL, CHIP 2.2K 5% 1/10W
 R3429 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W

R3430 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R3431 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3432 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3433 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
 R3434 1-216-027-00 s METAL, CHIP 120 5% 1/10W

R3435 1-216-655-11 s METAL, CHIP 1.5K 0.50% 1/10W
 R3436 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3437 1-216-065-00 s METAL, CHIP 4.7K 5% 1/10W
 R3438 1-216-025-91 s METAL, CHIP 100 5% 1/10W
 R3439 1-216-013-00 s METAL, CHIP 33 5% 1/10W

R3440 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3441 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W
 R3442 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3443 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
 R3444 1-216-645-11 s METAL 560 0.50% 1/10W

R3445 1-216-657-11 s METAL, CHIP 1.8K 0.5% 1/10W
 R3446 1-216-669-11 s METAL, CHIP 5.6K 0.5% 1/10W
 R3447 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3448 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3449 1-216-027-00 s METAL, CHIP 120 5% 1/10W

R3450 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3451 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3452 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R3454 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3455 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W

R3456 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3457 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3458 1-216-699-11 s METAL, CHIP 100K 0.50% 1/10W
 R3459 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3460 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W

R3461 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
 R3462 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3463 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3465 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3466 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W

R3467 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3467 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3468 1-216-063-91 s METAL, CHIP 3.9K 5% 1/10W
 R3469 1-216-063-91 s METAL, CHIP 3.9K 5% 1/10W
 R3470 1-216-027-00 s METAL, CHIP 120 5% 1/10W

R3471 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3472 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3473 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3474 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
R3475	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R3476	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R3479	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R3480	1-216-660-11	s METAL 2.4K 0.50% 1/10W
R3481	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R3482	1-216-639-11	s METAL, CHIP 330 0.5% 1/10W
R3483	1-216-686-11	s METAL, CHIP 30K 0.5% 1/10W
R3484	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3486	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3487	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3488	1-216-688-11	s METAL, CHIP 36K 0.50% 1/10W
R3489	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3490	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3491	1-216-061-00	s METAL, CHIP 3.3K 5% 1/10W
R3492	1-218-764-11	s METAL, CHIP 330K 0.50% 1/10W
R3541	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R3543	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3544	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3545	1-216-041-00	s METAL, CHIP 470 5% 1/10W
R3546	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3547	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3548	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R3549	1-216-077-00	s METAL, CHIP 15K 5% 1/10W
R3550	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R3551	1-216-099-00	s METAL, CHIP 120K 5% 1/10W
R3552	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R3553	1-216-049-91	s METAL, CHIP 1K 5% 1/10W
R3554	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R3555	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3558	1-216-085-00	s METAL, CHIP 33K 5% 1/10W
R3559	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3560	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3561	1-216-654-11	s METAL, CHIP 1.3K 0.5% 1/10W
R3562	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R3563	1-216-654-11	s METAL, CHIP 1.3K 0.5% 1/10W
R3567	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R3568	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3570	1-216-055-00	s METAL, CHIP 1.8K 5% 1/10W
R3571	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3572	1-216-055-00	s METAL, CHIP 1.8K 5% 1/10W
R3573	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R3574	1-216-295-00	s METAL, CHIP 0 1/10W
R3577	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R3578	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R3579	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3580	1-216-643-11	s METAL, CHIP 470 0.5% 1/10W
R3581	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R3582	1-216-658-11	s METAL, CHIP 2K 0.5% 1/10W
R3583	1-216-644-11	s METAL, CHIP 510 0.5% 1/10W
R3584	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3585	1-216-654-11	s METAL, CHIP 1.3K 0.5% 1/10W
R3586	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3587	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3588	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3589	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R3590	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R3592	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3593	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3594	1-216-659-11	s METAL, CHIP 2.2K 0.5% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
R3596	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R3597	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3598	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R3599	1-216-615-11	s METAL 33 0.50% 1/10W
R3600	1-216-627-11	s METAL, CHIP 100 0.50% 1/10W
R3601	1-216-639-11	s METAL, CHIP 330 0.5% 1/10W
R3602	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3604	1-216-069-00	s METAL, CHIP 6.8K 5% 1/10W
R3610	1-216-639-11	s METAL, CHIP 330 0.5% 1/10W
R3611	1-216-654-11	s METAL, CHIP 1.3K 0.5% 1/10W
R3612	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3613	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3614	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3615	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R3616	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R3617	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3618	1-216-057-00	s METAL, CHIP 2.2K 5% 1/10W
R3619	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3620	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3621	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3622	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3623	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R3624	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3625	1-216-655-11	s METAL, CHIP 1.5K 0.50% 1/10W
R3626	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3627	1-216-065-00	s METAL, CHIP 4.7K 5% 1/10W
R3628	1-216-013-00	s METAL, CHIP 33 5% 1/10W
R3629	1-216-025-91	s METAL, CHIP 100 5% 1/10W
R3630	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3631	1-216-657-11	s METAL, CHIP 1.8K 0.5% 1/10W
R3632	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3633	1-216-663-11	s METAL, CHIP 3.3K 0.5% 1/10W
R3634	1-216-645-11	s METAL 560 0.50% 1/10W
R3635	1-216-657-11	s METAL, CHIP 1.8K 0.5% 1/10W
R3636	1-216-669-11	s METAL, CHIP 5.6K 0.5% 1/10W
R3637	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3638	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3639	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3640	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3641	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3642	1-216-675-11	s METAL, CHIP 10K 0.5% 1/10W
R3644	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3645	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3646	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3648	1-216-699-11	s METAL, CHIP 100K 0.50% 1/10W
R3649	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3650	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3651	1-216-651-11	s METAL, CHIP 1K 0.5% 1/10W
R3652	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3653	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3655	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3656	1-216-067-00	s METAL, CHIP 5.6K 5% 1/10W
R3657	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3658	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R3659	1-216-063-91	s METAL, CHIP 3.9K 5% 1/10W
R3660	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3661	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3662	1-216-027-00	s METAL, CHIP 120 5% 1/10W
R3663	1-216-027-00	s METAL, CHIP 120 5% 1/10W

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Ref. No. or Q'ty	Part No.	SP Description
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R3664 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W
 R3665 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
 R3666 1-216-049-91 s METAL, CHIP 1K 5% 1/10W
 R3669 1-216-651-11 s METAL, CHIP 1K 0.5% 1/10W
 R3670 1-216-660-11 s METAL 2.4K 0.50% 1/10W

R3671 1-216-663-11 s METAL, CHIP 3.3K 0.5% 1/10W
 R3672 1-216-639-11 s METAL, CHIP 330 0.5% 1/10W
 R3673 1-216-686-11 s METAL, CHIP 30K 0.5% 1/10W
 R3674 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3676 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W

R3677 1-216-675-11 s METAL, CHIP 10K 0.5% 1/10W
 R3678 1-216-688-11 s METAL, CHIP 36K 0.50% 1/10W
 R3679 1-216-067-00 s METAL, CHIP 5.6K 5% 1/10W
 R3680 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R3681 1-216-061-00 s METAL, CHIP 3.3K 5% 1/10W

R3682 1-218-764-11 s METAL, CHIP 330K 0.50% 1/10W
 R3687 1-216-123-11 s METAL 1.2M 5% 1/10W
 R3688 1-216-123-11 s METAL 1.2M 5% 1/10W
 R3695 1-216-027-00 s METAL, CHIP 120 5% 1/10W
 R5391 1-216-027-00 s METAL, CHIP 120 5% 1/10W

RB2031 1-239-310-11 s RESISTOR ARRAY, CHIP 220K
 RB2131 1-239-310-11 s RESISTOR ARRAY, CHIP 220K
 RB2231 1-239-310-11 s RESISTOR ARRAY, CHIP 220K
 RB2361 1-239-621-11 s NETWORK RESISTOR (CHIP) 22
 RB2362 1-239-621-11 s NETWORK RESISTOR (CHIP) 22

RB2363 1-239-621-11 s NETWORK RESISTOR (CHIP) 22
 RB2364 1-239-621-11 s NETWORK RESISTOR (CHIP) 22
 RB2365 1-239-621-11 s NETWORK RESISTOR (CHIP) 22
 RB2366 1-239-621-11 s NETWORK RESISTOR (CHIP) 22
 RB2367 1-239-621-11 s NETWORK RESISTOR (CHIP) 22

RB2368 1-239-621-11 s NETWORK RESISTOR (CHIP) 22
 RB2369 1-239-621-11 s NETWORK RESISTOR (CHIP) 22
 RB2370 1-236-907-11 s RESISTOR BLOCK, CHIP 100KX4
 RB2371 1-236-907-11 s RESISTOR BLOCK, CHIP 100KX4
 RB2372 1-236-907-11 s RESISTOR BLOCK, CHIP 100KX4

RB2373 1-236-907-11 s RESISTOR BLOCK, CHIP 100KX4
 RB2374 1-236-907-11 s RESISTOR BLOCK, CHIP 100KX4
 RB2375 1-236-907-11 s RESISTOR BLOCK, CHIP 100KX4
 RB2441 1-239-421-11 s NETWORK RESISTOR (CHIP) 680
 RB2442 1-239-421-11 s NETWORK RESISTOR (CHIP) 680

RB2443 1-239-421-11 s NETWORK RESISTOR (CHIP) 680
 RB2444 1-239-421-11 s NETWORK RESISTOR (CHIP) 680
 RB2445 1-239-421-11 s NETWORK RESISTOR (CHIP) 680
 RB2446 1-239-421-11 s NETWORK RESISTOR (CHIP) 680
 RB2447 1-239-310-11 s RESISTOR ARRAY, CHIP 220K

RS361 1-216-295-00 s METAL, CHIP 0 1/10W
 RS531 1-216-295-00 s METAL, CHIP 0 1/10W
 RS1604 1-216-295-00 s METAL, CHIP 0 1/10W
 RS1991 1-216-295-00 s METAL, CHIP 0 1/10W
 RS1992 1-216-295-00 s METAL, CHIP 0 1/10W

RS1993 1-216-295-00 s METAL, CHIP 0 1/10W
 RS1994 1-216-295-00 s METAL, CHIP 0 1/10W
 RS1999 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2362 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2363 1-216-295-00 s METAL, CHIP 0 1/10W

RS2367 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2390 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2397 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2399 1-216-295-00 s METAL, CHIP 0 1/10W

(AD-117 BOARD)

Ref. No. or Q'ty	Part No.	SP Description
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RS2441 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2542 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2691 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2693 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2695 1-216-295-00 s METAL, CHIP 0 1/10W

RS2696 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2697 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2698 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2699 1-216-295-00 s METAL, CHIP 0 1/10W
 RS2700 1-216-295-00 s METAL, CHIP 0 1/10W

RS2911 1-216-295-00 s METAL, CHIP 0 1/10W
 RS3212 1-216-295-00 s METAL, CHIP 0 1/10W

RV2031 1-228-454-00 s RES, ADJ, METAL 200
 RV2032 1-228-475-00 s RES, ADJ, METAL 20K
 RV2131 1-228-454-00 s RES, ADJ, METAL 200
 RV2132 1-228-475-00 s RES, ADJ, METAL 20K
 RV2231 1-228-454-00 s RES, ADJ, METAL 200

RV2232 1-228-475-00 s RES, ADJ, METAL 20K
 RV2541 1-228-456-00 s RES, ADJ, METAL 1K
 RV2771 1-228-459-00 s RES, ADJ, METAL 10K
 RV3211 1-228-458-00 s RES, ADJ, METAL 5K
 RV3212 1-228-476-00 s RES, ADJ, METAL 50K

RV3213 1-228-462-00 s RES, ADJ, METAL 100K
 RV3214 1-228-461-00 s RES, ADJ, METAL 50K
 RV3351 1-228-458-00 s RES, ADJ, METAL 5K
 RV3352 1-228-476-00 s RES, ADJ, METAL 50K
 RV3354 1-228-462-00 s RES, ADJ, METAL 100K

RV3555 1-228-462-00 s RES, ADJ, METAL 100K
 RV3541 1-228-458-00 s RES, ADJ, METAL 5K
 RV3542 1-228-476-00 s RES, ADJ, METAL 50K
 RV3544 1-228-462-00 s RES, ADJ, METAL 100K
 RV3545 1-228-462-00 s RES, ADJ, METAL 100K

S1601 1-570-857-11 s SWITCH, SLIDE
 S1602 1-570-610-11 s SWITCH, TOGGLE
 S1603 1-570-610-11 s SWITCH, TOGGLE
 S2441 1-692-271-31 s SWITCH, SLIDE
 S2961 1-570-857-11 s SWITCH, SLIDE

S2962 1-692-270-41 s SWITCH, SLIDE

S2963 1-570-857-11 s SWITCH, SLIDE

X2801 1-760-275-11 s VCO, CRYSTAL 27.00MHz

3-3. Supplied Accessories

Ref. No. or Q'ty	Part No.	SP Description
1pc	△ 1-576-228-11	s FUSE (H.B.C.) T2AH 250V
3pcs	1-751-363-11	o CABLE ASSY, COAXIAL
1pc	3-694-169-01	o GUIDE, HARNESS
1pc	3-694-170-01	o NUT, PLATE
1pc	3-703-150-11	o CLAMP
1pc	7-621-770-67	s SCREW +B 2.6X6



Section 4

Semiconductor Pin Assignments

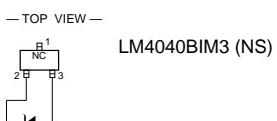
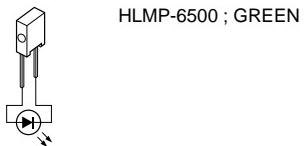
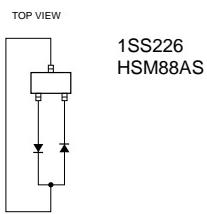
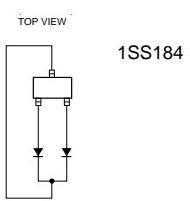
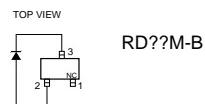
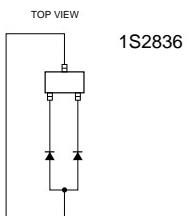
ここに記載されている半導体は、それぞれの機能を等価的に表したもので。なお、互換性のない型名を併記していることがありますので、部品を交換するときは、Spare Partsの章を参照してください。

等価回路はICメーカーのデータブックに従いました。

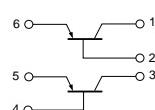
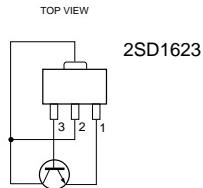
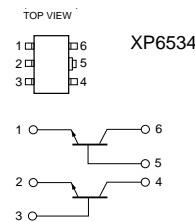
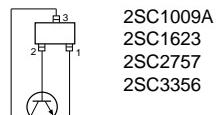
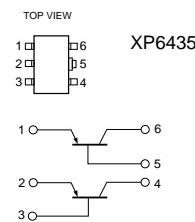
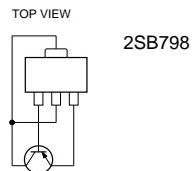
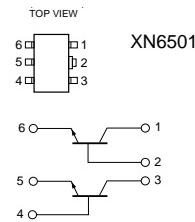
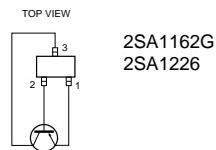
Semiconductors of which functions are equivalent are described here. For parts replacement, refer to the section of Spare Parts in this manual. The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.

DIODE	Page	TRANSISTOR	Page	IC	Page	IC	Page
1SS184	4-2	2SA1162G	4-2	74LCX16245MTDX	4-13	TL062CPS	4-12
1SS226	4-2	2SA1226	4-2			TL064CNS	4-12
1S2836	4-2	2SB798	4-2	AT27HC642-35DC	4-3	TL7705CPS-B	4-12
		2SC1009A	4-2			TLC272CPS	4-12
HLMP-6500	4-2	2SC1623	4-2	CLC505AJE	4-3		
HSM88AS	4-2	2SC2757	4-2	CXA1432M	4-3	UPC311G2	4-12
		2SC3356	4-2	CXA1487M	4-3	UPC319G2	4-12
LM4040BIM3	4-2	2SD1623	4-2	CXA1577R-7	4-4		
				CXB1341R	4-13		
RD??M-B	4-2	XN6401	4-2	CXD8068G	4-4		
		XN6501	4-2	CXD8072Q	4-6		
		XP6435	4-2	CKX1203AR	4-6		
		XP6534	4-2	LM3940IS	4-13		
				M62352GP	4-7		
				MB88341PFV	4-7		
				MC10H124M	4-7		
				MC14001BF	4-7		
				MC14011BF	4-8		
				MC14015BF	4-8		
				MC14050BF	4-8		
				MC1496M	4-8		
				MC74HC163AF	4-8		
				MC74HC4050F	4-8		
				MC74HC4053F	4-9		
						NJM1496M	4-8
						NJM78L09UA	4-9
				SBX1601A	4-9		
				SN74HC00ANS	4-9		
				SN74HC04ANS	4-9		
				SN74HC08ANS	4-9		
				SN74HC126ANS	4-10		
				SN74HC165ANS	4-10		
				SN74HC21ANS	4-10		
				SN74HC32ANS	4-10		
				SN74HC574ANS	4-11		
				SN74HC74ANS	4-10		
				SN74LS123NS	4-10		
						TC4W53FU	4-11
						TC74HC221AF	4-11
						TC74HC4051AF	4-11
						TC7S00F	4-11
						TC7S04FU	4-11
						TC7S08FU	4-12
						TC7S66F	4-12
						TC7W00FU	4-12

DIODE

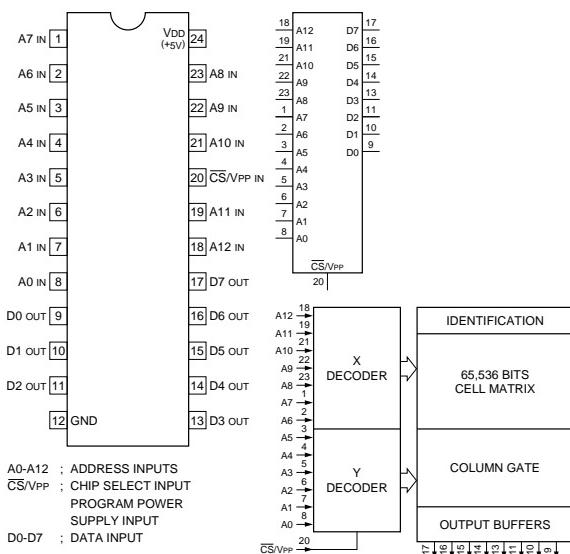


TRANSISTOR

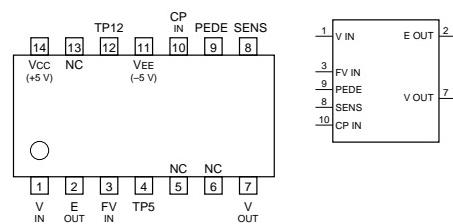


IC**AT27HC642-35DC (ATMEL)**

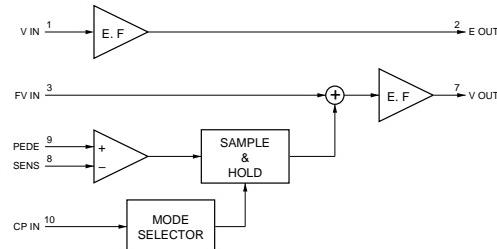
C-MOS 64K(8192x8)-BIT UV EPROM
—TOP VIEW—

**CXA1432M (SONY)FLAT PACKAGE**

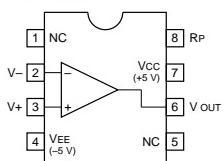
VIDEO SIGNAL CLAMPER
—TOP VIEW—



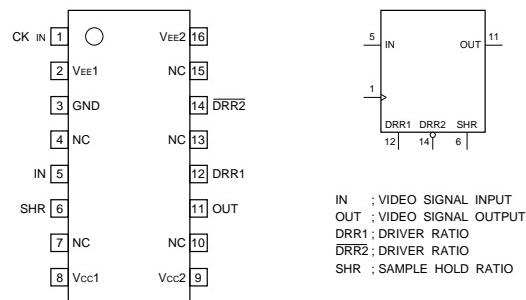
CP IN : CLAMP PULSE INPUT
E OUT : BUFFER AMP OUTPUT
FV IN : FLOATING VIDEO SIGNAL INPUT
PEDE : CLAMP LEVEL DC INPUT
SENS : CLAMP POINT SIGNAL INPUT
TP5, TP12 : FOR TEST
V IN : VIDEO SIGNAL INPUT
V OUT : VIDEO SIGNAL OUTPUT

**CLC505AJE (COMLINEAR)FLAT PACKAGE**

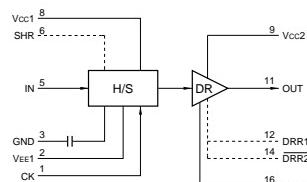
OPERATIONAL AMPLIFIER
—TOP VIEW—

**CXA1487M (SONY)**

VIDEO SAMPLE HOLD
—TOP VIEW—



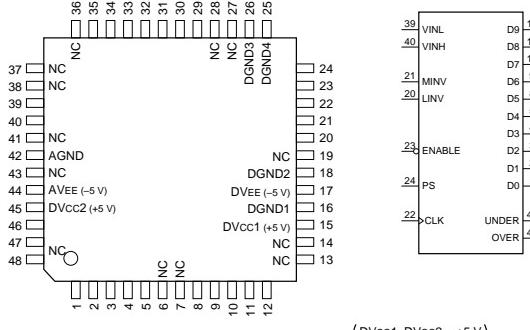
IN : VIDEO SIGNAL INPUT
OUT : VIDEO SIGNAL OUTPUT
DRR1 : DRIVER RATIO
DRR2 : DRIVER RATIO
SHR : SAMPLE HOLD RATIO



CXA1577R-7 (SONY)

**TTL 10-BIT 20MSPS A/D CONVERTER
—TOP VIEW—**

— TOP VIEW —



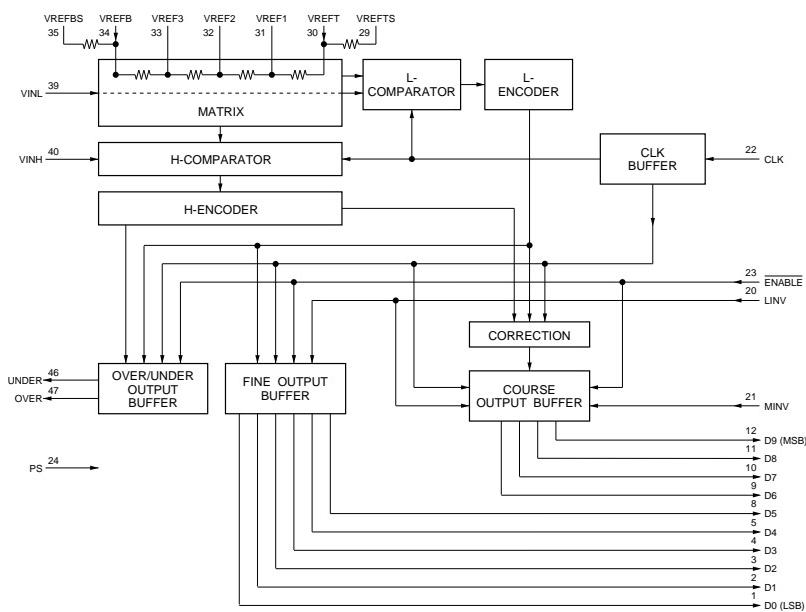
(AVEE, DVEE = -5 V)											
PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	O	D0 (LSB)	13	—	NC	25	—	DGND4	37	—	NC
2	O	D1	14	—	NC	26	—	DGND3	38	—	NC
3	O	D2	15	—	DVCC1	27	—	NC	39	I	VINL
4	O	D3	16	—	DGND1	28	—	NC	40	I	VINH
5	O	D4	17	—	DVEE	29	—	VREFTS	41	—	NC
6	—	NC	18	—	DGND2	30	I	VREFT	42	—	AGND
7	—	NC	19	—	NC	31	—	VREF1	43	—	NC
8	O	D5	20	I	LINV	32	—	VREF2	44	—	AV/EE
9	O	D6	21	I	MINV	33	—	VREF3	45	—	DVCC2
10	O	D7	22	I	CLK	34	I	VREFE	46	O	UNDER
11	O	D8	23	I	ENABLE	35	—	VREFBS	47	O	OVER
12	O	D9 (MSB)	24	I	PS	36	—	NC	48	—	NC

INPUT		OUTPUT
CLK	; SYSTEM CLOCK	D0 (LSB)-D9 (MSB) ; DIGITAL
ENABLE	; 3 STAGE CONTROL (L: ENABLE)	UNDER ; UNDER FLOW
LINV	; D0 (LSB)-D8 INVERSE	OVER ; OVER FLOW
MINV	; D9 (MSB) INVERSE	
PS	; POWER SAVE (H: POWER SAVE MODE)	
VIN, VINH	; ANALOG	

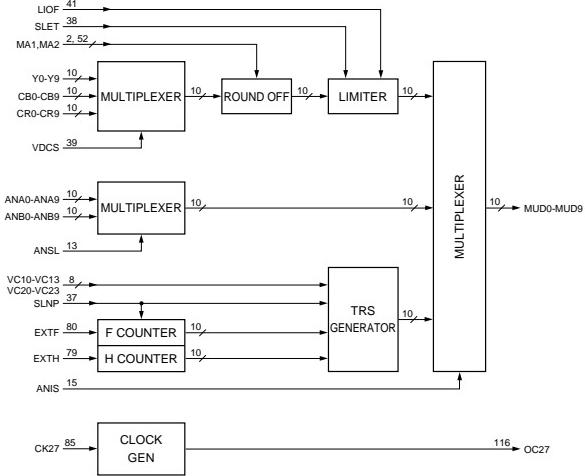
CXD8068G

**C-MOS 4 : 2 : 2 COMPONENT DIGITAL VIDEO
PARALLEL INTERFACE ENCODER**
-BOTTOM VIEW-

o	o	o	o	o	o	o	o	o	o	o	o	o	o
1	2	3	4	5	6	7	8	9	10	11	12	13	14
o	o	o	o	o	o	o	o	o	o	o	o	o	o
52	53	54	55	56	57	58	59	60	61	62	63	64	15
o	o	o	o	o	o	o	o	o	o	o	o	o	o
51	96	97	98	99	100	101	102	103	104	105	106	105	16
o	o	o	o	o	o	o	o	o	o	o	o	o	o
50	95	132	INDEX										
o	o	o											
49	94	131											
o	o	o											
48	93	130											
o	o	o											
47	92	129											
o	o	o											
46	91	128											
o	o	o											
45	90	127											
o	o	o											
44	89	126											
o	o	o											
43	88	125											
o	o	o											
42	87	124	123	122	121	120	119	118	117	116	115	114	25
o	o	o	o	o	o	o	o	o	o	o	o	o	o
41	86	85	84	83	82	81	80	79	78	77	76	75	26
o	o	o	o	o	o	o	o	o	o	o	o	o	o
40	38	37	36	35	34	33	32	31	30	29	28	27	28



PIN NO.	I/O	SIGNAL									
1	-	NC	34	I	TUC1	67	I	ANB4	100	O	ANEH
2	I	MA1	35	I	TUC2	68	I	ANB2	101	-	GND
3	I	CR8	36	I	INCH	69	I	ANB0	102	-	GND
4	I	CR6	37	I	SLNP	70	I	VC20	103	O	MUD0
5	I	CR4	38	I	SLET	71	I	VC22	104	O	MUD1
6	I	CR2	39	I	VDCS	72	O	MUD7	105	-	GND
7	I	CR0	40	I	COEN	73	O	MUD8	106	-	GND
8	I	ANA8	41	I	LIOF	74	O	MUD9	107	O	MUD2
9	I	ANAA6	42	I	Y8	75	-	GND	108	O	MUD3
10	I	ANAA4	43	I	Y6	76	I	TSFL	109	O	MUD4
11	I	ANAA2	44	I	Y4	77	I	TSST	110	-	GND
12	I	ANAO4	45	I	Y2	78	I	TSRT	111	-	GND
13	I	ANSL	46	I	Y0	79	I	EXTH	112	O	MUD5
14	-	NC	47	I	CB8	80	I	EXTF	113	O	MUD6
15	I	ANIS	48	I	CB6	81	I	INEH	114	-	Vdd
16	I	ANB9	49	I	CB4	82	I/O	CM7	115	-	GND
17	I	ANB7	50	I	CB2	83	I/O	CM5	116	O	OC27
18	I	ANB5	51	I	CB0	84	I/O	CM3	117	I/O	CM9
19	I	ANB3	52	I	MA2	85	I	CK27	118	I/O	CM8
20	I	ANB1	53	-	GND	86	-	Vdd	119	-	GND
21	I	VC21	54	I	CR9	87	I	Y9	120	-	GND
22	I	VC23	55	I	CR7	88	I	Y7	121	I/O	CM6
23	I	VC10	56	I	CR5	89	I	Y5	122	I/O	CM4
24	I	VC11	57	I	CR3	90	I	Y3	123	-	GND
25	I	VC12	58	I	CR1	91	I	Y1	124	-	GND
26	I	VC13	59	I	AN9A	92	I	CB9	125	I/O	CM2
27	-	NC	60	I	AN7A	93	I	CB7	126	I/O	CM1
28	I	LDAT	61	I	AN5A	94	I	CB5	127	I/O	CM0
29	I	TSCK	62	I	AN3A	95	I	CB3	128	-	GND
30	I	TSLD	63	I	AN1A	96	I	CB1	129	-	GND
31	I	TUB1	64	-	Vdd	97	-	GND	130	O	MFP
32	I	TUB2	65	I	ANB8	98	O	OC6	131	O	OC13
33	I	TUS	66	I	ANB6	99	O	ANEV	132	-	Vdd



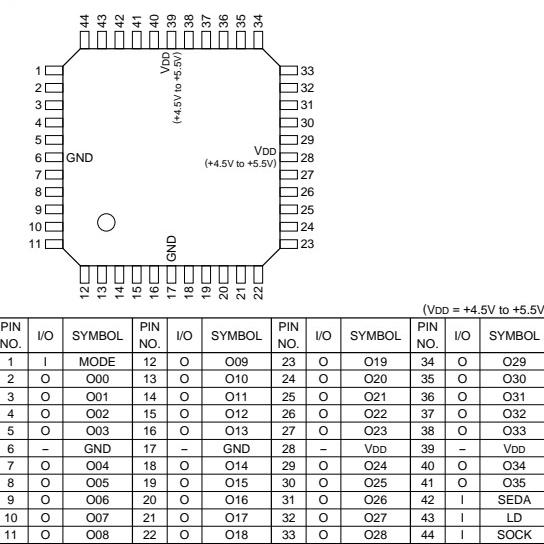
46	23	Y0	VC10	VC11	VC12	VC13	VC14	MUD0
	24	Y1		VC11	VC12	VC13	VC14	MUD1
	25	Y2		VC12	VC13	VC14	VC15	MUD2
	26	Y3		VC13	VC14	VC15	VC16	MUD3
	27	Y4		VC14	VC15	VC16	VC17	MUD4
	28	Y5		VC15	VC16	VC17	VC18	MUD5
	29	Y6		VC16	VC17	VC18	VC19	MUD6
	30	Y7		VC17	VC18	VC19	VC20	MUD7
	31	Y8		VC18	VC19	VC20	VC21	MUD8
	32	Y9		VC19	VC20	VC21	VC22	MUD9
	33	CB0		VC20	VC21	VC22	VC23	OC27
	34	CB1		VC21	VC22	VC23	VC24	OC13
	35	CB2		VC22	VC23	VC24	VC25	OC6
	36	CB3		VC23	VC24	VC25	VC26	
	37	CB4		VC24	VC25	VC26	VC27	MFP
	38	CB5		VC25	VC26	VC27	VC28	
	39	CB6		VC26	VC27	VC28	VC29	
	40	CB7		VC27	VC28	VC29	VC30	
	41	CB8		VC28	VC29	VC30	VC31	
	42	CB9		VC29	VC30	VC31	VC32	
	43	CR0		VC30	VC31	VC32	VC33	
	44	CR1		VC31	VC32	VC33	VC34	
	45	CR2		VC32	VC33	VC34	VC35	
	46	CR3		VC33	VC34	VC35	VC36	
	47	CR4		VC34	VC35	VC36	VC37	
	48	CR5		VC35	VC36	VC37	VC38	
	49	CR6		VC36	VC37	VC38	VC39	
	50	CR7		VC37	VC38	VC39	VC40	
	51	CR8		VC38	VC39	VC40	VC41	
	52	CR9		VC39	VC40	VC41	VC42	
	53	ANA0		VC40	VC41	VC42	VC43	
	54	ANA1		VC41	VC42	VC43	VC44	
	55	ANA2		VC42	VC43	VC44	VC45	
	56	ANA3		VC43	VC44	VC45	VC46	
	57	ANA4		VC44	VC45	VC46	VC47	
	58	ANA5		VC45	VC46	VC47	VC48	
	59	ANA6		VC46	VC47	VC48	VC49	
	60	ANA7		VC47	VC48	VC49	VC50	
	61	ANA8		VC48	VC49	VC50	VC51	
	62	ANA9		VC49	VC50	VC51	VC52	
	63	ANB0		VC50	VC51	VC52	VC53	
	64	ANB1		VC51	VC52	VC53	VC54	
	65	ANB2		VC52	VC53	VC54	VC55	
	66	ANB3		VC53	VC54	VC55	VC56	
	67	ANB4		VC54	VC55	VC56	VC57	
	68	ANB5		VC55	VC56	VC57	VC58	
	69	ANB6		VC56	VC57	VC58	VC59	
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	71	ANB8		VC58	VC59	VC60	VC61	
	72	ANB9		VC59	VC60	VC61	VC62	
	73	ANSL		VC60	VC61	VC62	VC63	
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	206	ANIS		VC193	VC194	VC195	VC196	
	207	ANIS		VC194	VC195	VC196	VC197	
	208	ANIS		VC195	VC196	VC197	VC198	

INPUT	
AN0-ANA9	: ANCILLARY SIGNAL (13.5MHz 20 BITS OR 27MHz 10 BITS)
ANB0-ANB9	: ANCILLARY SIGNAL (13.5MHz 20 BITS)
ANIS	: ANC SIGNAL INSERT SELECTOR
ANSL	: ANC 10 BITS/20 BITS SIGNAL SELECTOR
CBO-CB9	: Cb OR Cs • Cr MPX SIGNAL
CK27	: 27MHz CLOCK
COEN	: CONNECT WITH "+5V"
CR0-CR9	: CR OR Cb • CR MPX SIGNAL (INPUT CHECK)
EXTF	: REFERENCE F
EXTH	: REFERENCE H
INEH	: CONNECT WITH "+5V"
INCH	: CONNECT WITH "+5V"
TUB1,YUB2	: CONNECT WITH "GND"
TUS,TUC1,TUC2	: CONNECT WITH "GND"
LDTA,TSCK,TSLD	: FOR TEST
LIOF	: DATA LIMIT SELECTOR (ON/OFF)
MA1,MA2	: ROUND MODE SELECTOR (ROUND, RAISE, CUT OFF, THROUGH)
SLET	: DATA SELECTOR (8 BITS OR 10 BITS)
SLNP	: 525 LINE/625 LINE SELECTOR
TSFL,TSST,TSRT	: FOR TEST
VC10-VC13	: 525/60 (FIELD1) V BLANKING CONTROL
VC20-VC23	: 525/60 (FIELD2) V BLANKING CONTROL
VDCS	: CHROMA SIGNAL SELECTOR (Cs • Cr MPX/Cb, Cr)
Y0-Y9	: Y SIGNAL
OUTPUT	
ANEH	: DATA INTERVAL SIGNAL ("HIGH" AT BETWEEN EAV AND SAV)
ANEV	: DATA VALID SIGNAL ("HIGH" AT THE DATA VALID PERIOD IN V BLK INTERVAL)
CM0-CM9	: F, H COUNTER
MFP	: POSITION OF F COUNTER VALUE (MULTIPLEX SIGNAL)
MUD0-MUD9	: MULTIPLEX DATA
OC6	: 6.75MHz CLOCK
OC13	: 13.5MHz CLOCK

CXD8072Q (SONY)FLAT PACKAGE

C-MOS SERIAL TO PARALLEL CONVERTER

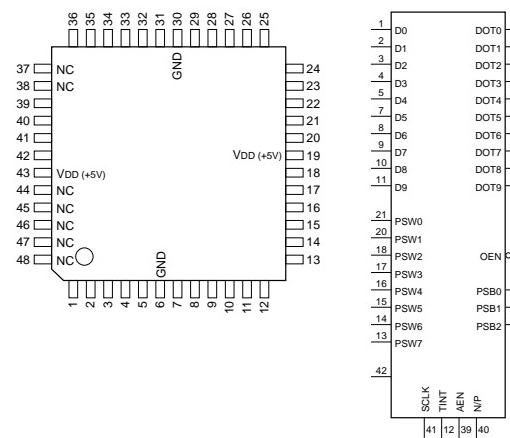
TOP VIEW-



CXK1203AR (SONY)FLAT PACKAGE

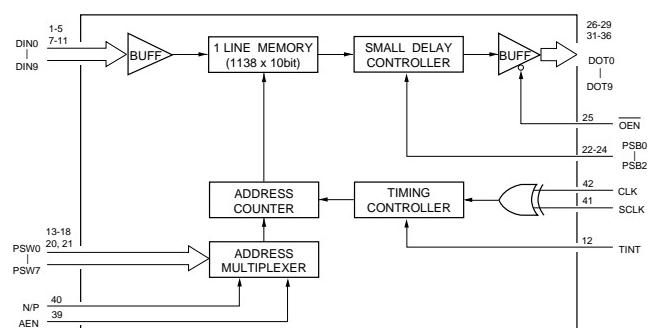
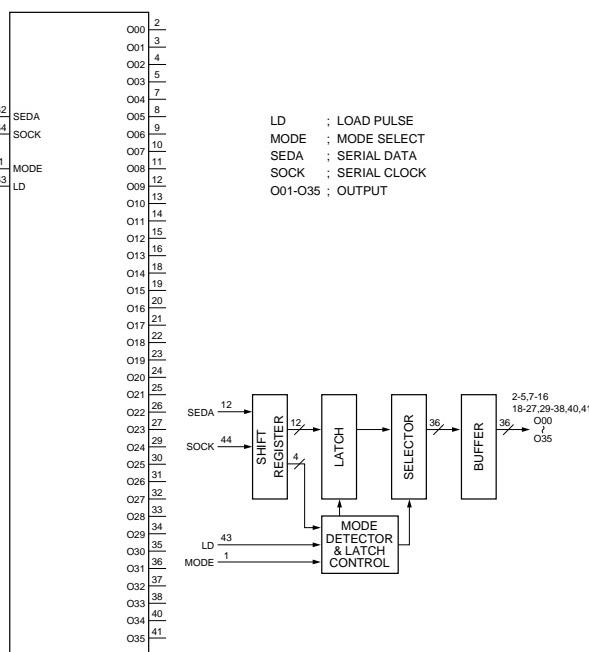
C-MOS DIGITAL LINE MEMORY

TOP VIEW-



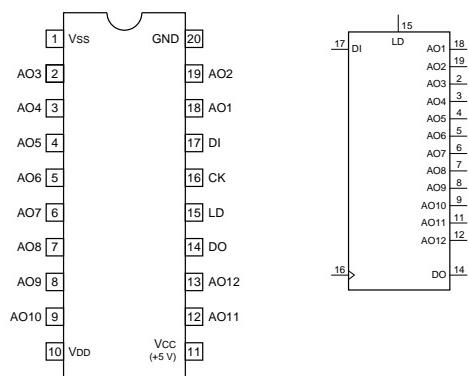
PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL	PIN NO.	I/O	SIGNAL
1	I	D0	13	I	PSW7	25	I	OEN	37	-	N.C.
2	I	D1	14	I	PSW6	26	O	DOT9	38	-	N.C.
3	I	D2	15	I	PSW5	27	O	DOT8	39	I	AEN
4	I	D3	16	I	PSW4	28	O	DOT7	40	I	N/P
5	I	D4	17	I	PSW3	29	O	DOT6	41	I	SCLK
6	-	GND	18	I	PSW2	30	-	GND	42	I	CLK
7	I	D5	19	-	V _{DD}	31	O	DOT5	43	-	V _{DD}
8	I	D6	20	I	PSW1	32	O	DOT4	44	-	N.C.
9	I	D7	21	I	PSW0	33	O	DOT3	45	-	N.C.
10	I	D8	22	I	PSB2	34	O	DOT2	46	-	N.C.
11	I	D9	23	I	PSB1	35	O	DOT1	47	-	N.C.
12	I	TINT	24	I	PSB0	36	O	DOT0	48	-	N.C.

AEN : LINE MEMORY SELECT
 CLK : CLOCK
 DIN0-DIN9 : VIDEO DATA INPUT
 DOT0-DOT9 : VIDEO DATA OUTPUT
 N/P : NTSC/PAL/SECAM SELECT
 OEN : OUTPUT ENABLE
 PSB0-PSB2 : DELAY STEP SELECT (1 BITxN)
 PSW0-PSW7 : DELAY STEP SELECT (8 BITxN)
 SCLK : CLOCK EDGE SELECT
 TINT : TEST



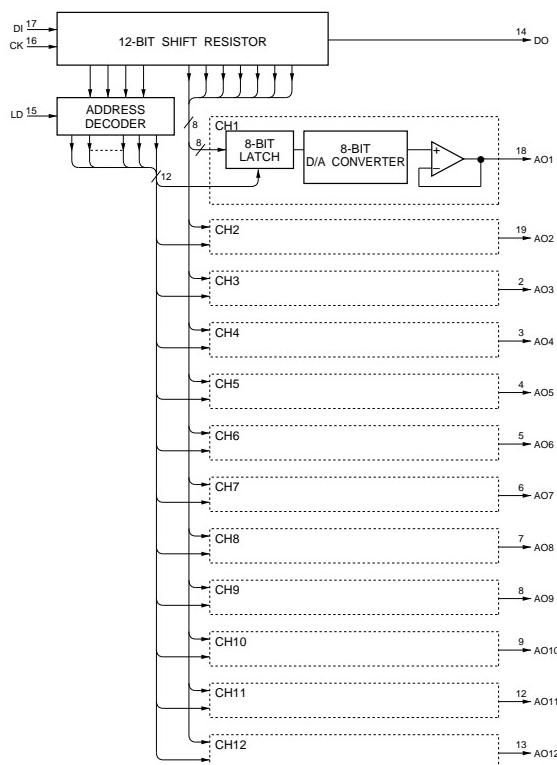
M62352GP (MITSUBISHI)FLAT PACKAGE

C-MOS 8-BITx12 CHANNEL D/A CONVERTER
(WITH BUFFER OPERATIONAL AMPLIFIER)
—TOP VIEW—



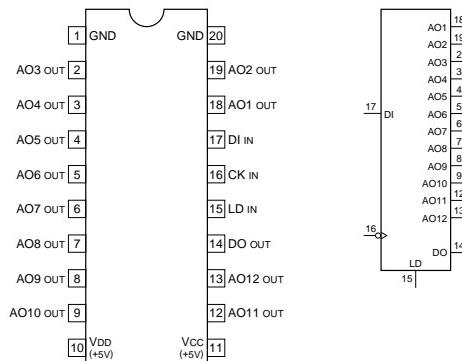
AO1-AO12 : 8-BIT D/A OUTPUTS
CK : CLOCK INPUT
DI : SERIAL DATA INPUT
DO : DATA OUTPUT

NOTE:
3.5 V < Vdd < Vcc
-3.5 V < Vss < Vcc

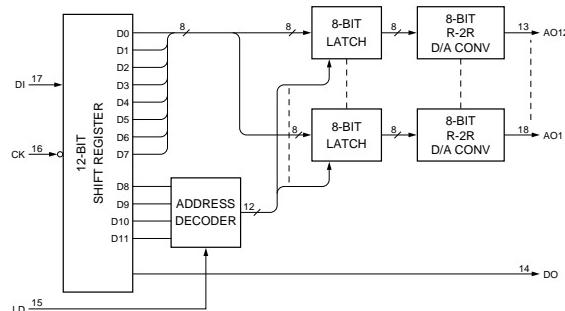
**MB88341PFV**

C-MOS 8-BIT D/A CONVERTER

—TOP VIEW—

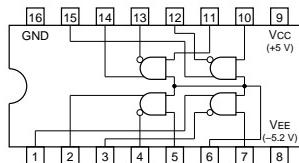


AO1-AO12 : 8-BIT D/A OUTPUTS
CK : CLOCK INPUT
DI : SERIAL DATA INPUT
DO : DATA OUTPUT
LD : DATA LOAD CONTROL INPUT (H : LOAD)

**MC10H124M (MOTOROLA)FLAT PACKAGE**

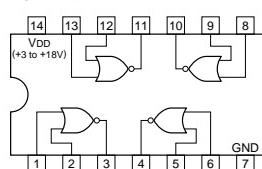
ECL TTL-TO-ECL TRANSLATOR

—TOP VIEW—

**MC14001BF (MOTOROLA)FLAT PACKAGE**

C-MOS 2-INPUT NOR GATE

—TOP VIEW—



$$A = \overline{A} \quad B = \overline{B}$$

$$Y = \overline{A+B} = \overline{\overline{A}+\overline{B}}$$

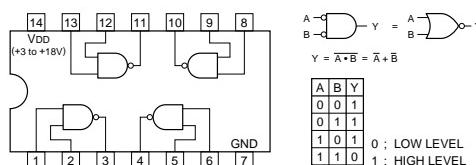
A	B	Y
0	0	1
0	1	0
1	0	0
1	1	1

0 : LOW LEVEL
1 : HIGH LEVEL

MC14011BF (MOTOROLA)FLAT PACKAGE

C-MOS 2-INPUT NAND GATE

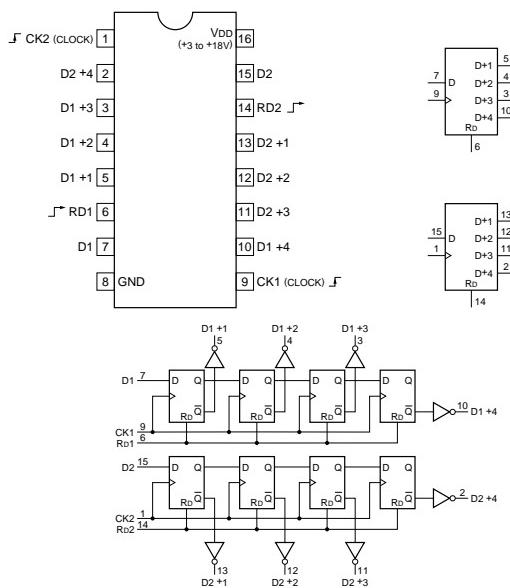
-TOP VIEW-



MC14015BF (MOTOROLA)FLAT PACKAGE

C-MOS DUAL 4-STAGE STATIC SHIFT REGISTER WITH DIRECT RESET

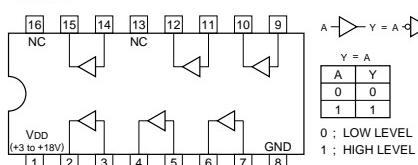
-TOP VIEW-



MC14050BF (MOTOROLA)FLAT PACKAGE

C-MOS NON-INVERTING TYPE BUFFER/CONVERTER

-TOP VIEW-

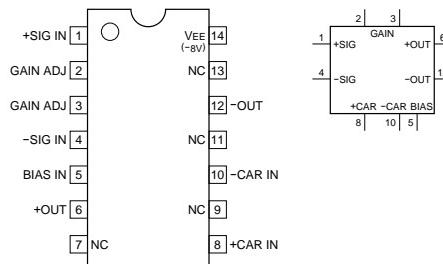


MC1496M (MOTOROLA)FLAT PACKAGE

NJM1496M (JRC)FLAT PACKAGE

BALANCED MODULATOR/DEMODULATOR

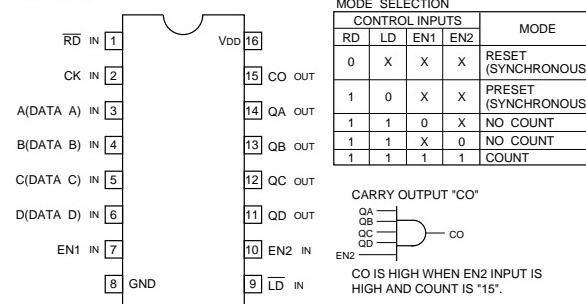
-TOP VIEW



MC74HC163AF (MOTOROLA)FLAT PACKAGE

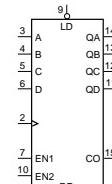
C-MOS PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER

—TOP VIET



NOTE:

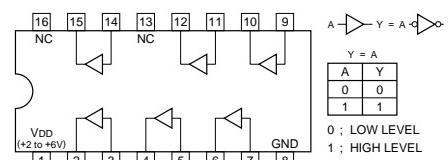
TYPE	VDD
HC	+2 to +6V
AC/VHC	+2 to +5.5V
HCT/ACT/ECT	+5V



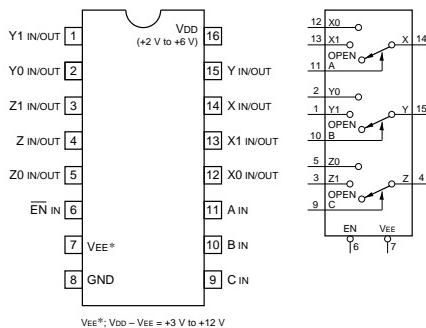
MC74HC4050E (MOTOROLA) FLAT PACKAGE

C-MOS NON-INVERTING TYPE BUFFER/CONVERTER

-TOP VIEW

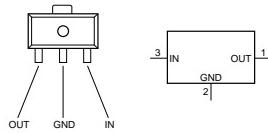


MC74HC4053F (MOTOROLA)FLAT PACKAGE

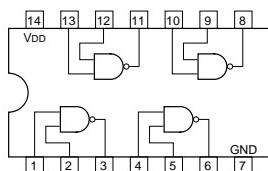
C-MOS TRIPLE 2-CHANNEL ANALOG MULTIPLEXER/DEMULTIPLEXER
—TOP VIEW—

CONTROL INPUTS			SELECT			ON CHANNEL			
EN	C	B	A	Z0	Y0	X0	Z1	Y1	
0	0	0	0	Z0	Y0	X0	Z1	Y0	
0	0	0	1	Z0	Y0	X1	Z1	Y0	
0	0	1	0	Z0	Y1	X0	Z1	Y1	
0	0	1	1	Z0	Y1	X1	Z1	Y1	
0	1	0	0	Z1	Y0	X0	Z1	Y0	
0	1	0	1	Z1	Y0	X1	Z1	Y0	
0	1	1	0	Z1	Y1	X0	Z1	Y1	
0	1	1	1	Z1	Y1	X1	Z1	Y1	
1	X	X	X	OPEN			X; DONT CARE		

NJM78L09UA (JRC)+9 V(100 mA)

POSITIVE VOLTAGE REGULATOR
—SIDE VIEW—

SN74HC00ANS (TI)FLAT PACKAGE

C-MOS QUAD 2-INPUT NAND GATES
—TOP VIEW—

$$Y = \overline{A} \cdot \overline{B} = \overline{A} + \overline{B}$$

A	B	Y
0	0	1
0	1	0
1	0	1
1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

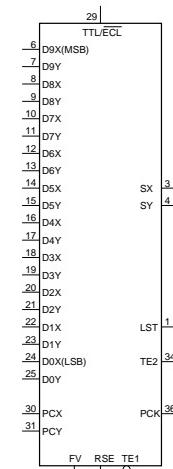
NOTE:

TYPE	VDD
TC74AC00 TYPE	+2 to +5.5V
TC74VHC00	+5V
MC74HCT00N	+5V
74ACT00 TYPE	+4.5 to +5.5V
OTHER TYPES	+2 to +6V

SBX1601A (SONY)

8- OR 10-BIT PARALLEL-TO-SERIAL CONVERTER
—BOTTOM VIEW—

INDEX	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37			
○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○



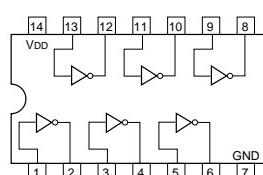
INPUT
D9X-D0X, D9Y-D0Y : PARALLEL DATA INPUTS
PCX, PCY : PARALLEL CLOCK INPUTS
FV : VCO FREQ. ADJ. INPUT
RSE : VCO RANGE SELECT INPUT (H: HIGH RANGE)
TE1 : TEST TERMINAL (LOW = TEST)
TTL/ECL : VCC FOR INPUT LEVEL SELECT
(+5V = TTL, GND = ECL)

OUTPUT
LST : PLL LOCK DETECT OUTPUT (H: LOCK)
PCK : PARALLEL CLOCK OUTPUT
SX, SY : SERIAL DATA OUTPUTS
TE2 : TEST TERMINAL

VEE1 = -5V
VEE2 = -3.5V

PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL	PIN No.	I/O	SIGNAL
1	O	LST	11	I	D7Y	21	I	D2Y	31	I	PCY
2	—	GND	12	I	D6X	22	I	D1X	32	—	GND
3	O	SX	13	I	D6Y	23	I	D1Y	33	I	FV
4	O	SY	14	I	D5X	24	I	D0X(LSB)	34	O	TE2
5	—	GND	15	I	D5Y	25	I	D0Y	35	I	TE1
6	I	D9X(MSB)	16	I	D4X	26	—	VEE1	36	O	PCK
7	I	D9Y	17	I	D4Y	27	—	VEE2	37	—	NC
8	I	D8X	18	I	D3X	28	I	RSE	—	—	—
9	I	D8Y	19	I	D3Y	29	—	TTL/ECL	—	—	—
10	I	D7X	20	I	D2X	30	I	PCX	—	—	—

SN74HC04ANS (TI)FLAT PACKAGE

C-MOS HEX INVERTERS
—TOP VIEW—

$$A \rightarrow Y = A \rightarrow \bar{Y}$$

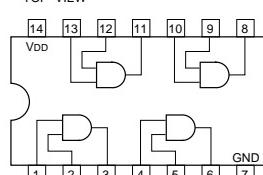
A	B	Y
0	0	1
0	1	0
1	0	1
1	1	0

0 ; LOW LEVEL
1 ; HIGH LEVEL

NOTE:

TYPE	VDD
74HCT04 TYPE	+5V
TC74AC04 TYPE	+2 to +5.5V
TC74VHC04 TYPE	+2 to +5.5V
74ACT04 TYPE	+4.5 to +5.5V
OTHER TYPES	+2 to +6V

SN74HC08ANS (TI)FLAT PACKAGE

C-MOS QUAD 2-INPUT AND GATES
—TOP VIEW—

$$Y = A \bullet B = \overline{\overline{A} + \overline{B}}$$

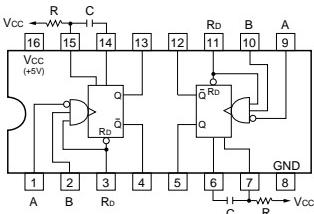
A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

0 ; LOW LEVEL
1 ; HIGH LEVEL

NOTE:

TYPE	VDD
TC74AC08 TYPE	+2 to +5.5V
MC74ACT08M	+2 to +8V
TC40H	+2 to +6V
OTHER TYPES	+2 to +6V

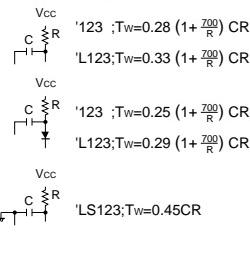
SN74LS123NS (TI)FLAT PACKAGE

TTL RETRIGGERABLE MONOSTABLE MULTIVIBRATORS WITH DIRECT RESET
-TOP VIEW-

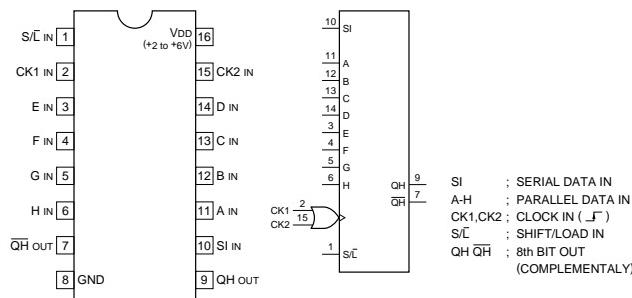
INPUTS	OUTPUTS
R _d	A B Q \bar{Q}
0 x x 0	1
x 1 x 0	1
x x 0 0	1
1 0 ↑	1
1 ↓ 1	1
↑ 0 1	1
x	DONT CARE

0 ; LOW LEVEL
1 ; HIGH LEVEL
x ; DONT CARE

OUTPUT PULSE WIDTH

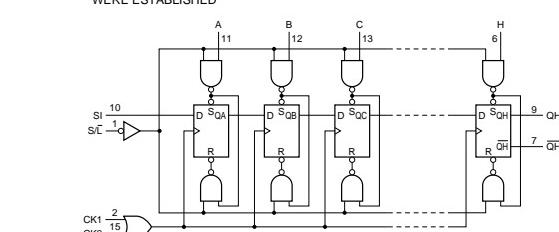


SN74HC165ANS (TI)FLAT PACKAGE

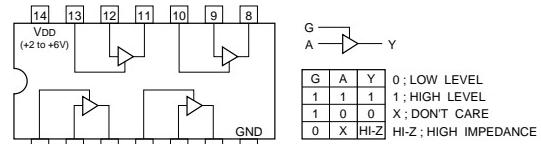
C-MOS SERIAL-OR PARALLEL-INPUT SHIFT REGISTER
-TOP VIEW-

INPUTS		CONTENTS		OUTPUT	OPERATION
S/L	CK1+CK2	SI	A-----H	QA QB-----QH	
0	X	X	a-----h	a b---- h	PARALLEL LOAD
1	↓	0	X	0 QAo---	RIGHT SHIFT
1	↓	1	X	1 QAo---	
1	↑	X	X	QAo QBo---	
1	0	X	X	QBo---	
1	1	X	X	QBo---	

0 : LOW LEVEL
1 : HIGH LEVEL
X : DONT CARE
a-h : LEVEL OF INPUTS A-H
QAo-QHo : LEVEL OF QA-QH BEFORE THE INDICATED INPUT CONDITIONS WERE ESTABLISHED

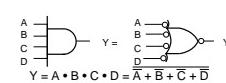
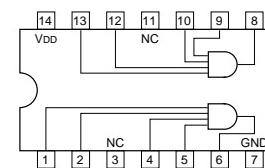


SN74HC126ANS (TI)FLAT PACKAGE

C-MOS BUS BUFFER GATE WITH 3-STATE OUTPUT
-TOP VIEW-

G A Y	0 ; LOW LEVEL
1 1 1	1 ; HIGH LEVEL
1 0 0	X ; DONT CARE
0 X	HI-Z ; HIGH IMPEDANCE

SN74HC21ANS (TI)FLAT PACKAGE

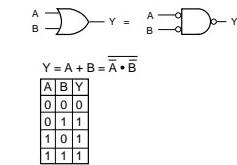
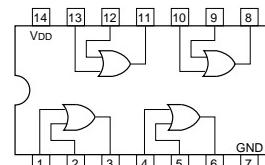
C-MOS DUAL 4-INPUT POSITIVE AND GATE
-TOP VIEW-

A B C D Y	0 0 0 0 0
0 0 0 1 0	
0 0 1 0 0	
0 0 1 1 0	
0 1 0 0 0	
1 1 1 1 1	

0 ; LOW LEVEL
1 ; HIGH LEVEL

NOTE:	TYPE	V _{DD}
	HC	+2V to +6V
	VHC	+2V to +5.5V

SN74HC32ANS (TI)FLAT PACKAGE

C-MOS QUAD 2-INPUT OR GATES
-TOP VIEW-

Y = A + B

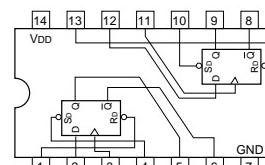
A B Y	0 0 0
0 1 1	
1 0 1	
1 1 1	

0 ; LOW LEVEL

1 ; HIGH LEVEL

NOTE:	TYPE	V _{DD}
	AC/VHC	+2 to +5.5V
	HC	+2 to +6V

SN74HC74ANS (TI)FLAT PACKAGE

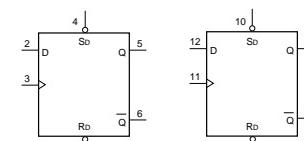
C-MOS DUAL D-TYPE FLIP-FLOPS WITH DIRECT SET/RESET
-TOP VIEW-

INPUTS		OUTPUTS	
S _d	R _d	Q _{n+1}	Q _{n+1}
0	1	X	1 0
1	0	X	0 1
0	0	X	1 1
1	1	↓	1 0
1	1	↑	0 1
1	1	0	X Qn Qn-bar

0 ; LOW LEVEL

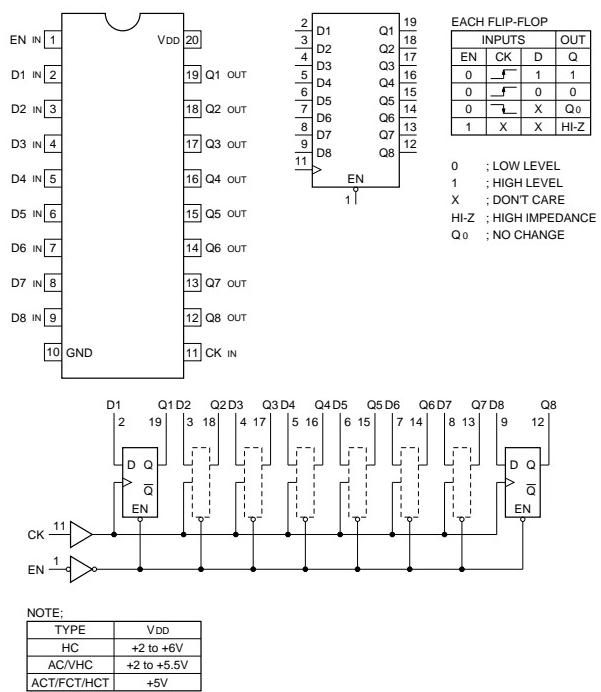
1 ; HIGH LEVEL

X ; DONT CARE



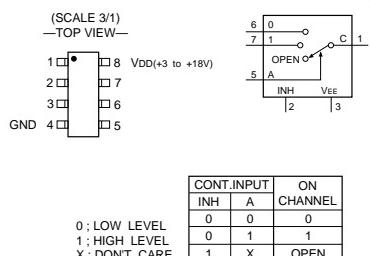
NOTE:	TYPE	V _{DD}
	HCT/ACT	+5V
	TC74AC/VHC	+2 to +5.5V
	OTHERS	+2 to +6V

SN74HC574ANS (TI)FLAT PACKAGE

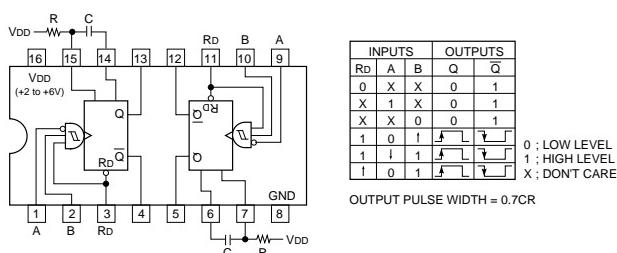
C-MOS 3-STATE D-TYPE EDGE-TRIGGERED FLIP-FLOP
—TOP VIEW—

TC4W53FU (TOSHIBA)CHIP PACKAGE

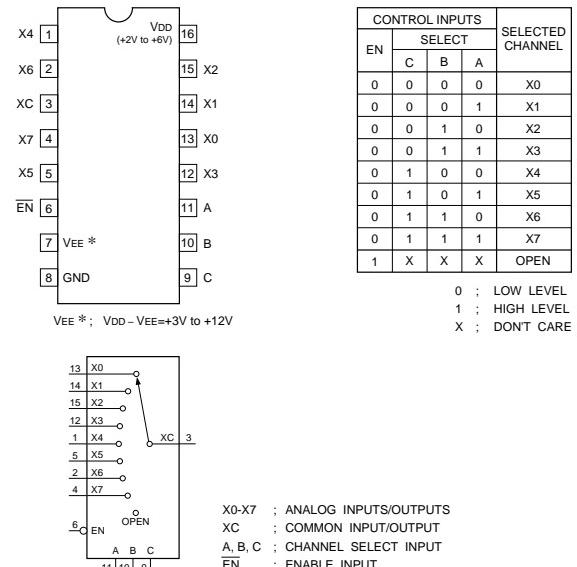
C-MOS 2-CHANNEL MULTIPLEXER / DEMULTIPLEXER



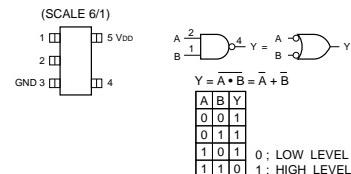
TC74HC221AF (TOSHIBA)FLAT PACKAGE

C-MOS MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT
—TOP VIEW—

TC74HC4051AF (MOTOROLA)FLAT PACKAGE

C-MOS 8-CHANNEL ANALOG MULTIPLEXER/DEMULTIPLEXER
—TOP VIEW—

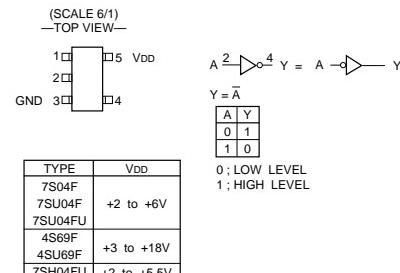
TC7S00F (TOSHIBA)CHIP PACKAGE

C-MOS 2-INPUT NAND GATE
—TOP VIEW—

TYPE	V _{DD}
7S00F	+2 to +6 V
7S00FU	+2 to +6 V
4S11F	+3 to +18 V
4SU11F	+3 to +18 V
7SH00FU	+2 to +5.5 V

TC7S04FU (TOSHIBA)CHIP PACKAGE

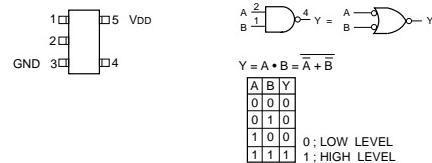
C-MOS INVERTER



TC7S08FU (TOSHIBA)CHIP PACKAGE

C-MOS 2-INPUT AND GATE

—TOP VIEW—

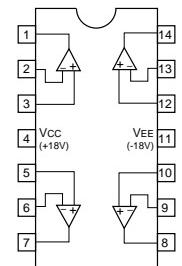


TYPE	V _{DD}
7508F	+2 to +6V
7S08FU	+2 to +6V
4S81F	+3 to +18V
14S81F	+3 to +18V
7SH08FU	-2 to +5.5V

TL064CNS (TI)FLAT PACKAGE

OPERATIONAL AMPLIFIER
(J FET INPUT)

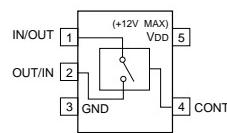
—TOP VIEW—



TC7S66F (TOSHIBA)

C-MOS ANALOG SWITCH

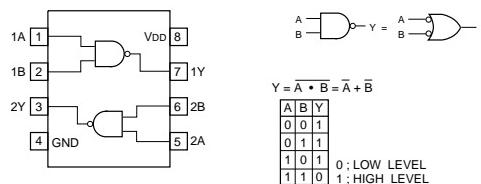
—TOP VIEW—



TC7W00FU (TOSHIBA)CHIP PACKAGE

C-MOS 2-INPUT NAND GATE

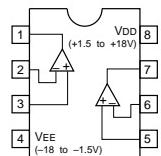
—TOP VIEW—



TL062CPS (TI)FLAT PACKAGE

OPERATIONAL AMPLIFIER
(J FET INPUT)

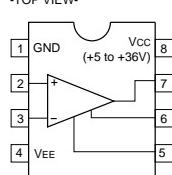
—TOP VIEW—



UPC311G2 (NEC)FLAT PACKAGE

VOLTAGE COMPARATOR

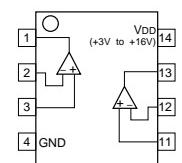
—TOP VIEW—



TLC272CPS (TI)FLAT PACKAGE

OPERATIONAL AMPLIFIER

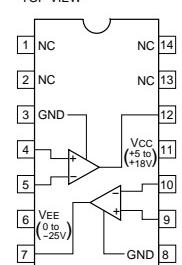
—TOP VIEW—



UPC319G2 (NEC)FLAT PACKAGE

DUAL VOLTAGE COMPARATOR

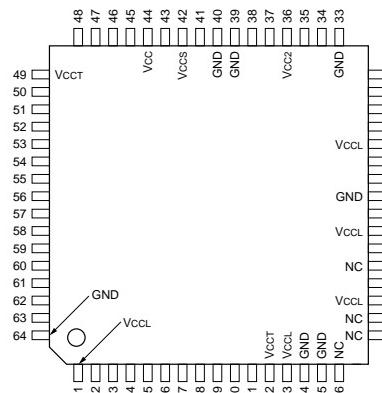
—TOP VIEW—



CXB1341R (SONY)

SERIAL DIGITAL INTERFACE TRANSMISSION ENCODER

—TOP VIEW—



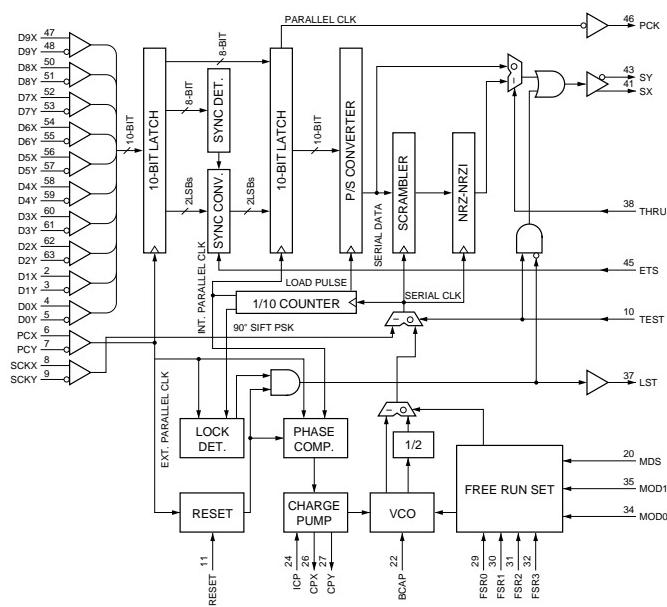
PIN NO.	I/O	SIGNAL									
1	—	VCC	17	—	NC	33	—	GND	49	—	VCC
2	I	D1X	18	—	NC	34	I	MOD0	50	I	D8X
3	I	D1Y	19	—	VCCL	35	I	MOD1	51	I	D8Y
4	I	D0X	20	I	MDS	36	—	VCC2	52	I	D7X
5	I	D0Y	21	—	NC	37	O	LST	53	I	D7Y
6	I	PCX	22	I	BCAP	38	I	THRU	54	I	D6X
7	I	PCY	23	—	VCCL	39	—	GND	55	I	D6Y
8	I	SCKX	24	I	ICP	40	—	GND	56	I	D5X
9	I	SCKY	25	—	GND	41	O	SX	57	I	D5Y
10	I	TEST	26	O	CPX	42	—	VCCS	58	I	D4X
11	I	RESET	27	O	CPY	43	O	SY	59	I	D4Y
12	—	VCC	28	—	VCCL	44	—	VCCL	60	I	D3X
13	—	VCCL	29	I	FSR0	45	I	ETS	61	I	D3Y
14	—	GND	30	I	FSR1	46	O	PCK	62	I	D2X
15	—	GND	31	I	FSR2	47	I	D9X	63	I	D2Y
16	—	NC	32	I	FSR3	48	I	D9Y	64	—	GND

INPUT

BCAP : EXTERNAL CAPACITOR FOR VCO
 D9X - D0X : POSITIVE PARALLEL DATA
 D9Y - D0Y : NEGATIVE PARALLEL DATA
 ETS : 8-BIT/10-BIT SELECT (L = 8-BIT, H OR OPEN = 10-BIT)
 FSR0 - FSR3 : EXTERNAL RESISTOR FOR SETTING THE FREE-RUN FREQUENCY OF VCO
 ICP : EXTERNAL RESISTOR FOR CHARGE PUMP
 MDS : TEST
 MOD0, MOD1 : VCO RATE SELECT
 PCX : POSITIVE PARALLEL CLOCK
 PCY : NEGATIVE PARALLEL CLOCK
 RESET : PLL RESET
 SCKX, SCKY : TEST
 TEST : TEST
 THRU : TEST

OUTPUT

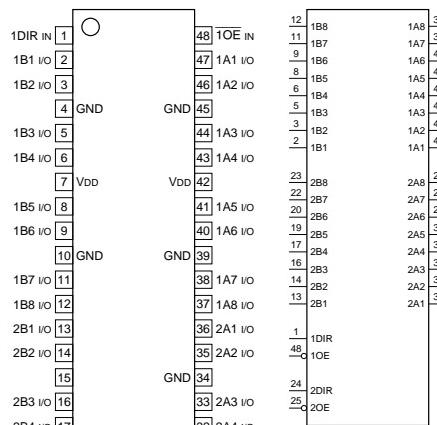
LST : PLL LOCK STATUS
 PCK : PARALLEL CLOCK
 CPX, CPY : CHARGE PUMP
 SX, SY : EXTERNAL RESISTOR FOR SERIAL DIFFERENTIAL



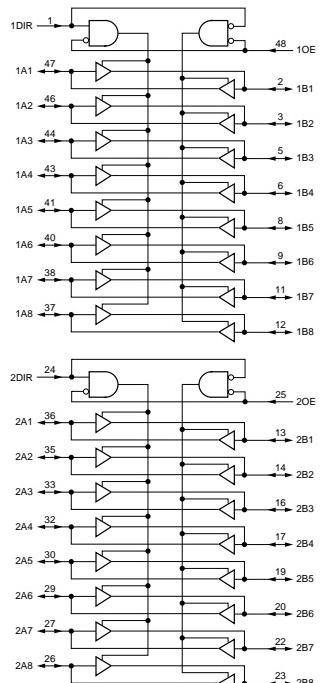
74LCX16245MTDX (NS)FLAT PACKAGE

C-MOS 16-BIT BIDIRECTIONAL TRANSCEIVER

—TOP VIEW—



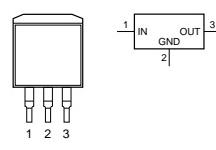
INPUTS	OUTPUTS
xOE	0 : LOW LEVEL
xDIR	0 : HIGH LEVEL
0	BUS B DATA TO BUS A
1	BUS A DATA TO BUS B
x	HI-Z
25	2OE IN



LM3940IS

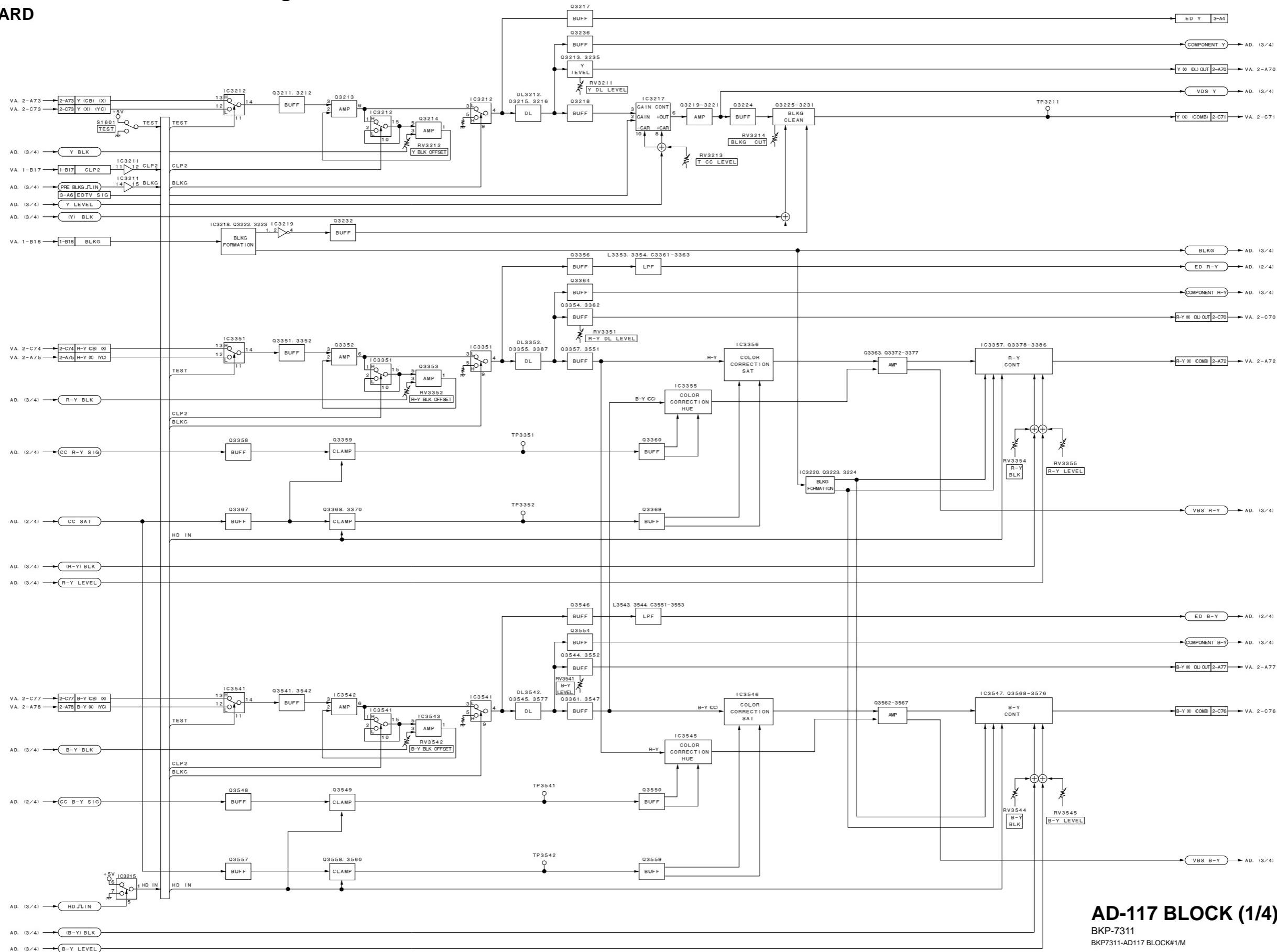
LOW DROPOUT REGULATOR

—TOP VIEW—



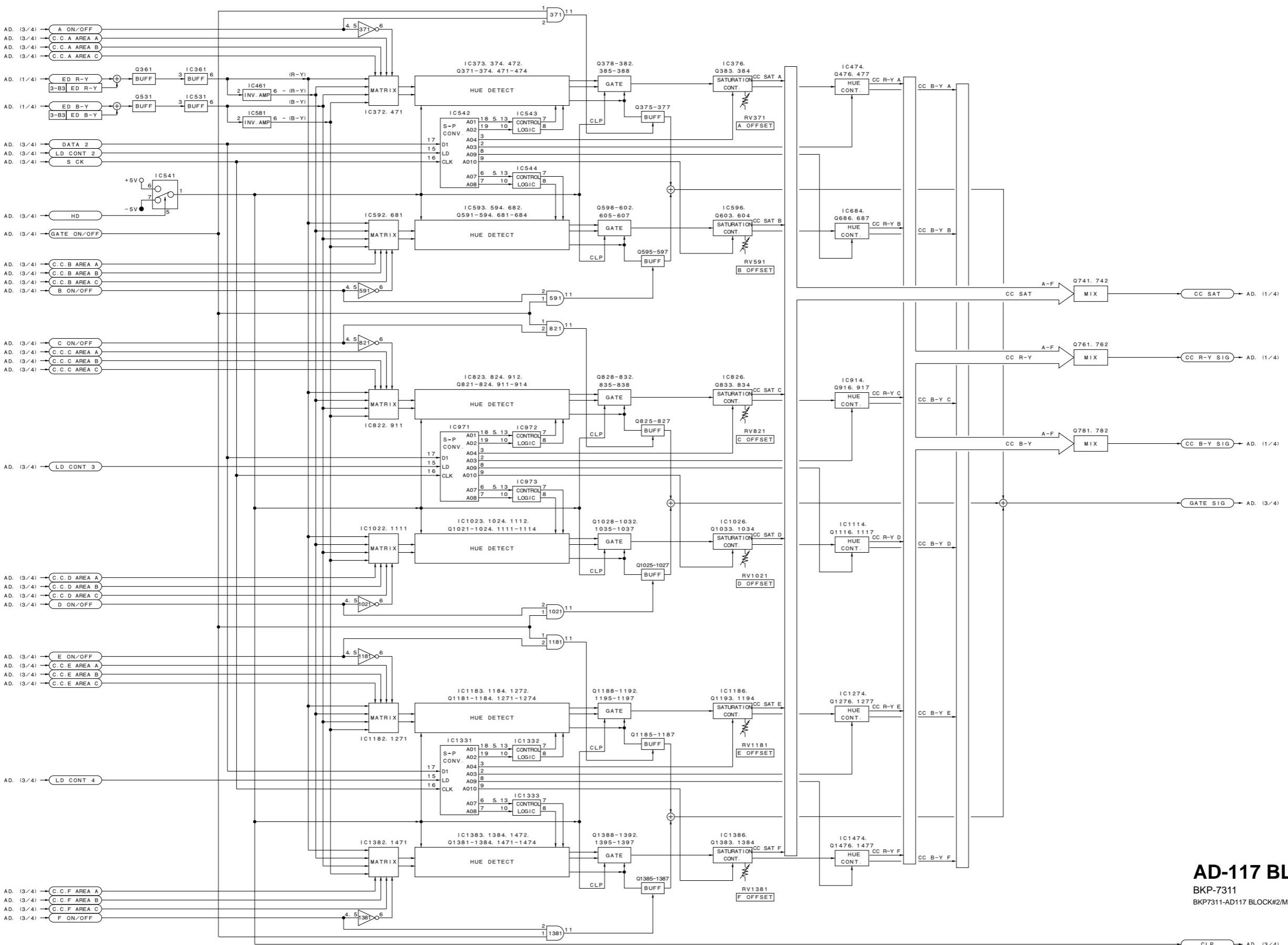
Section 5 Block Diagram

AD-117 BOARD



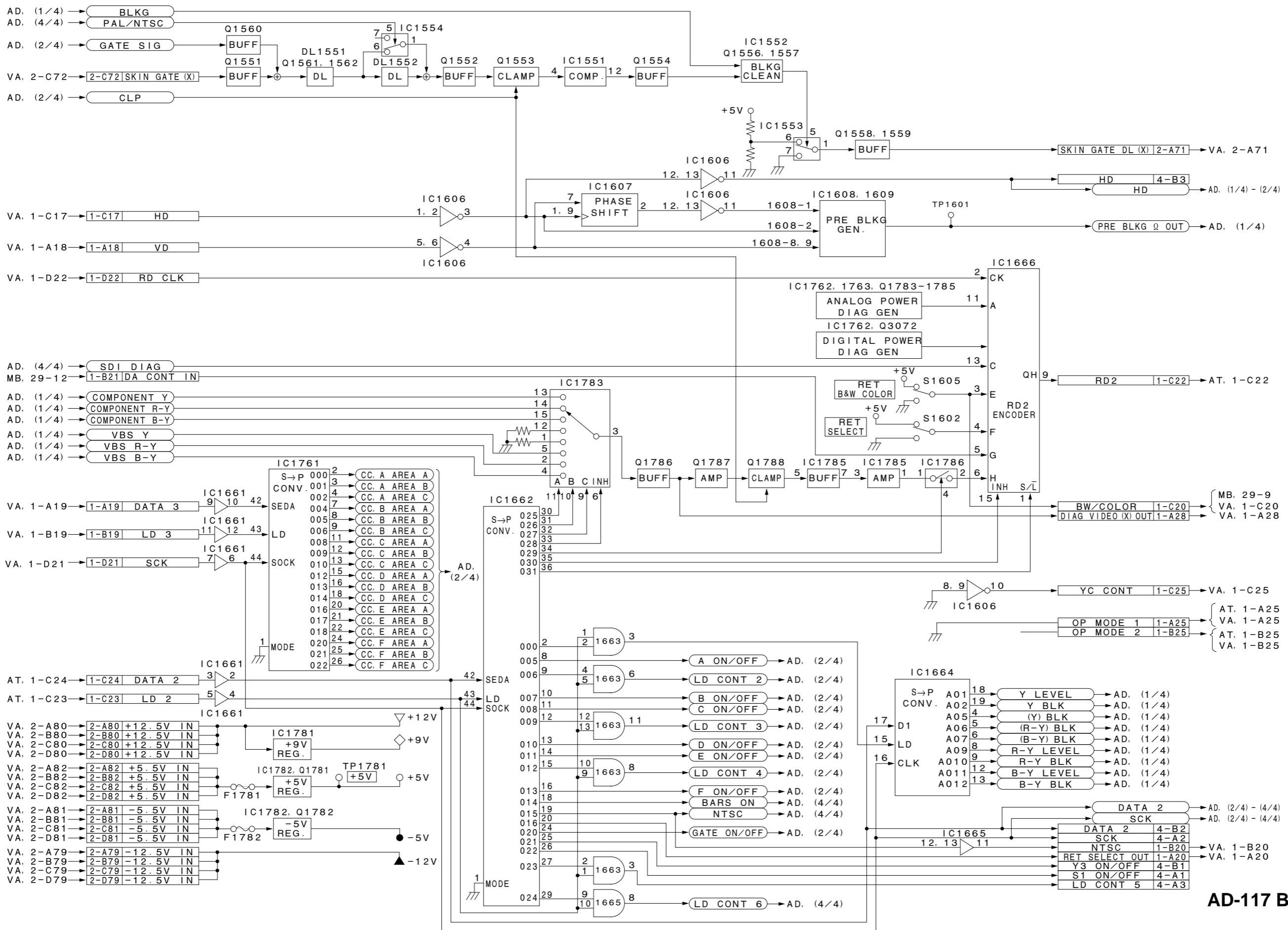
AD-117 BLOCK (1/4)

BKP-7311
BKP7311-AD117 BLOCK#1/M

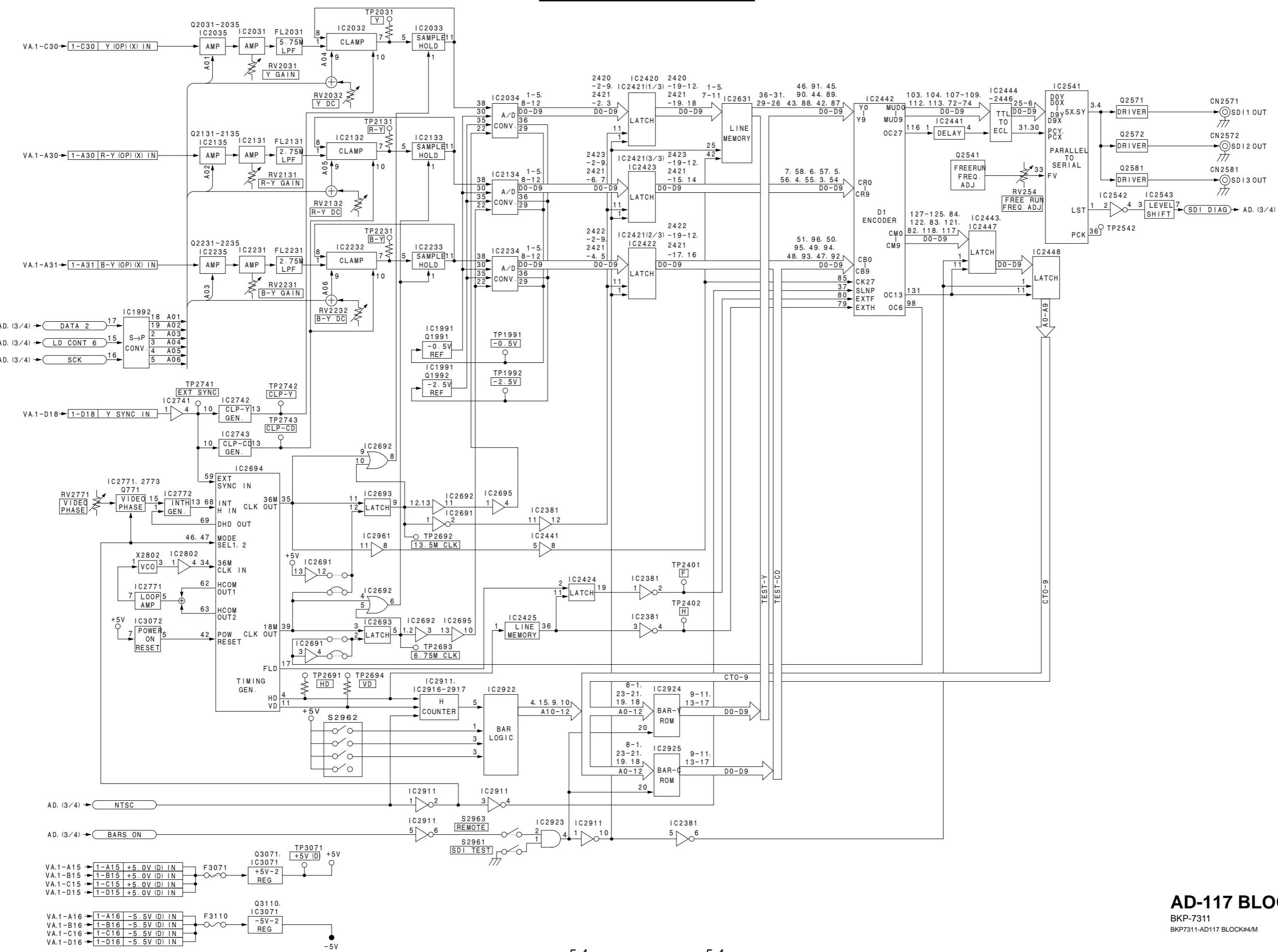


AD-117 BLOCK (2/4)

BKP-7311
BKP7311-AD117 BLOCK#2/M



AD-117 BLOCK (3/4)

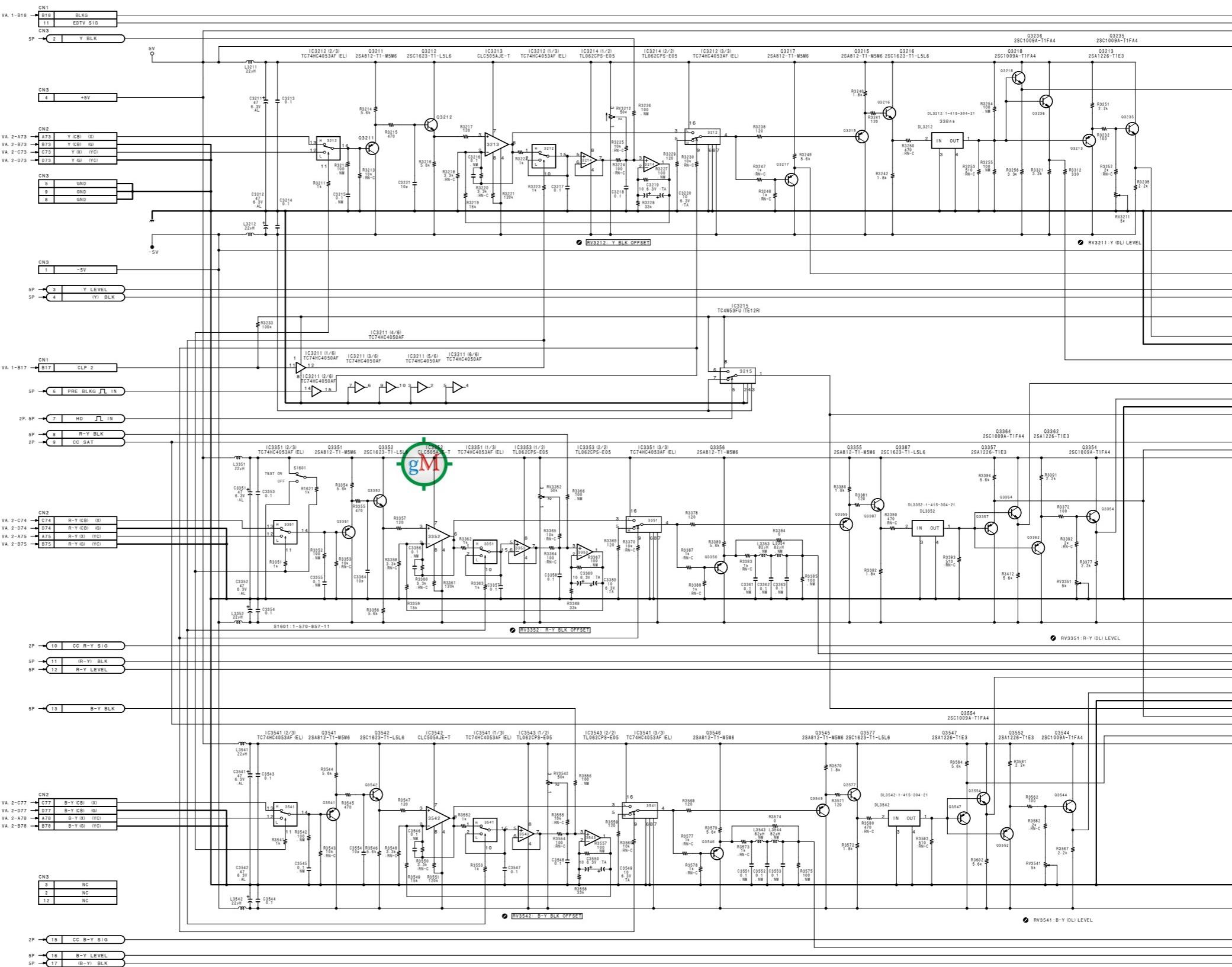


AD-117 BLOCK (4/4)

BKP-7311
BKP7311-AD117 BLOCK#4/M

Section 6
Schematic Diagram

1

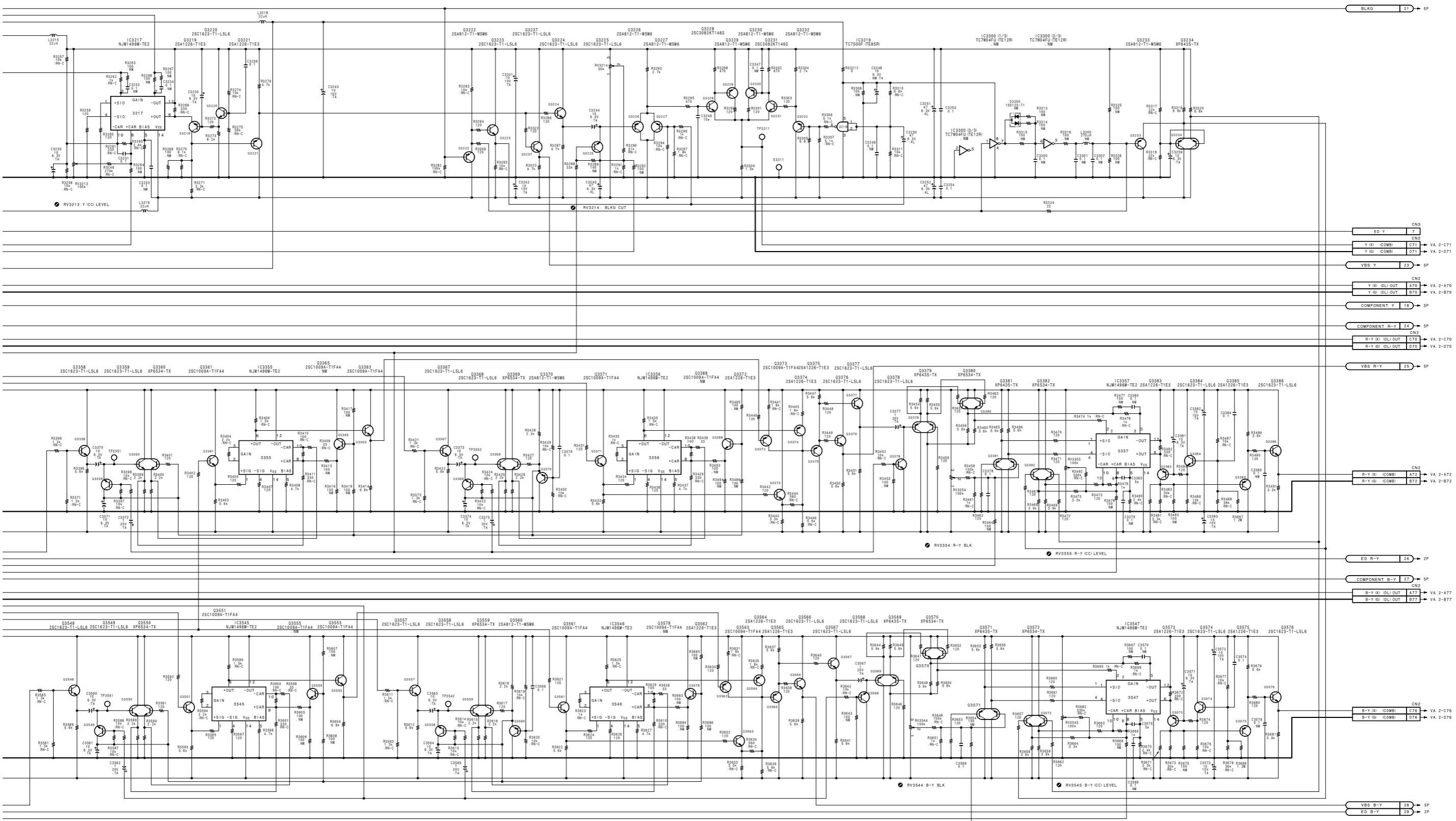


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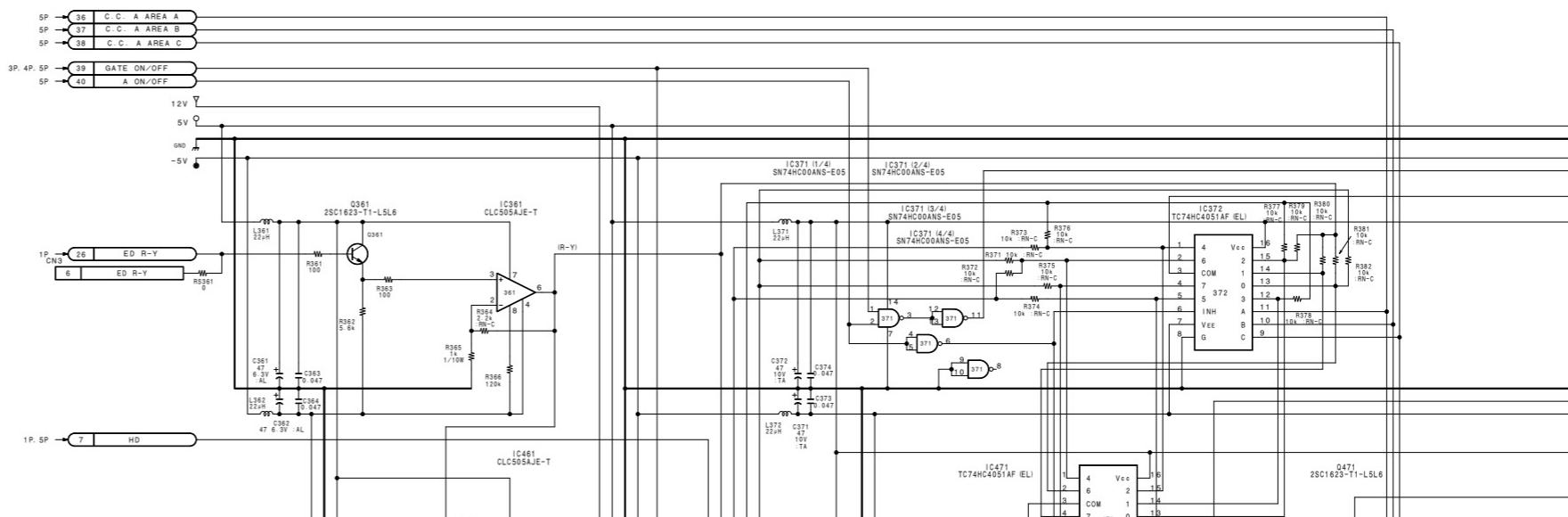
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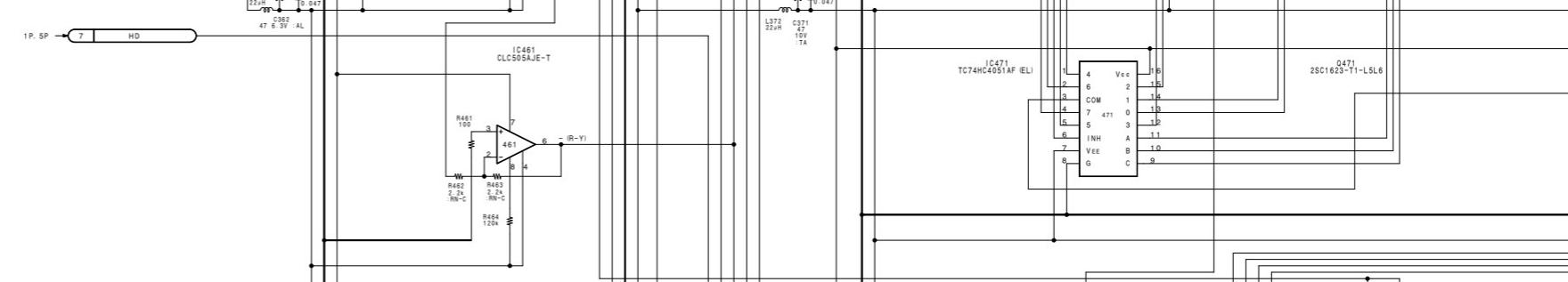
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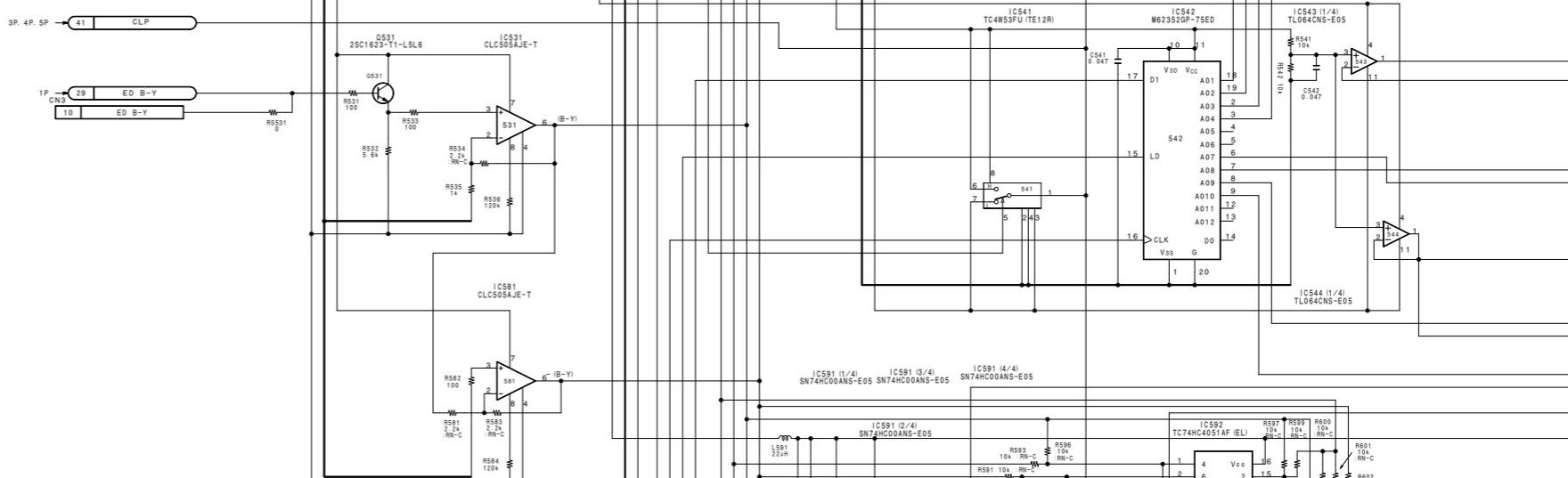
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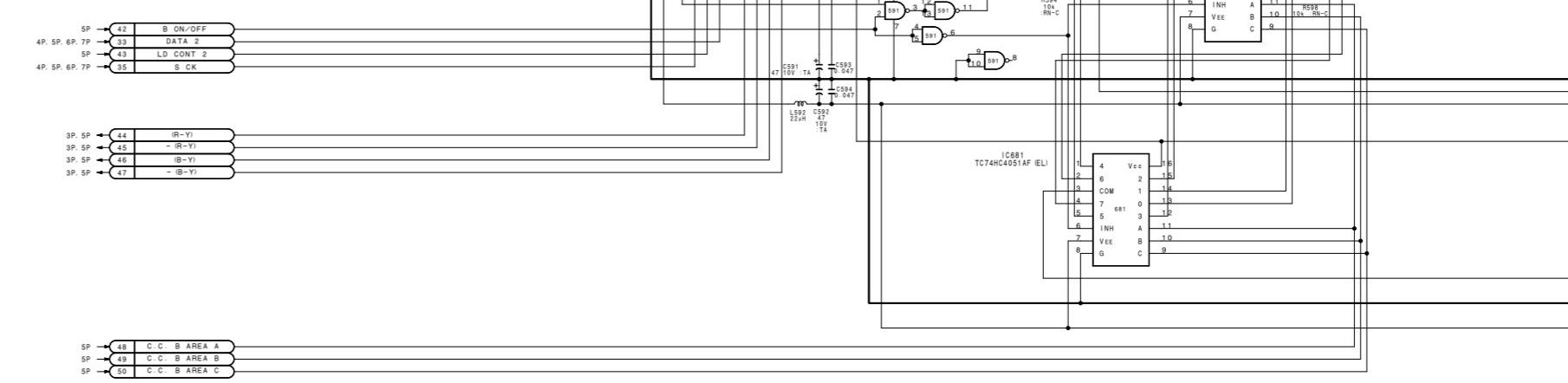
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A

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C

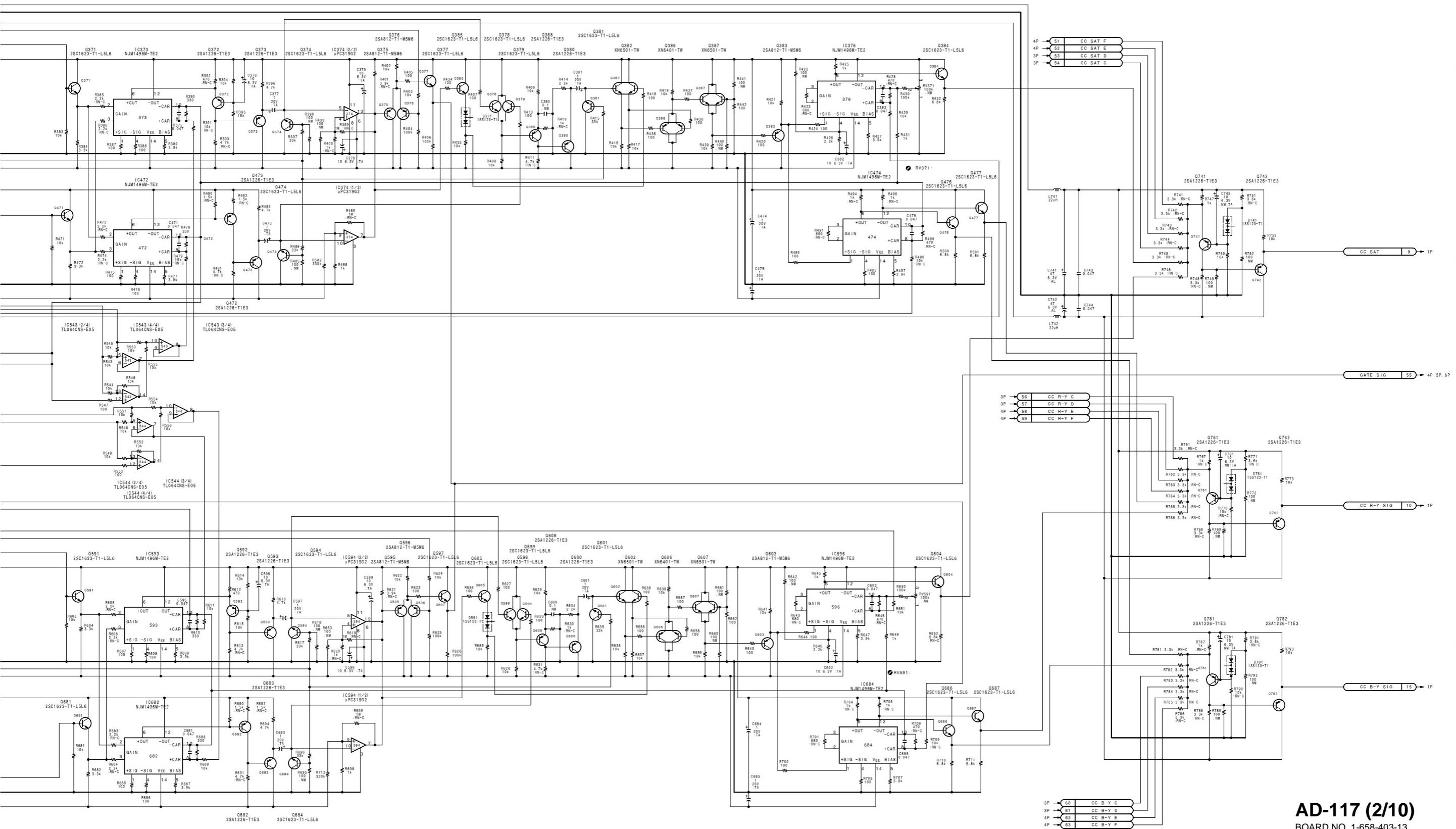
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E

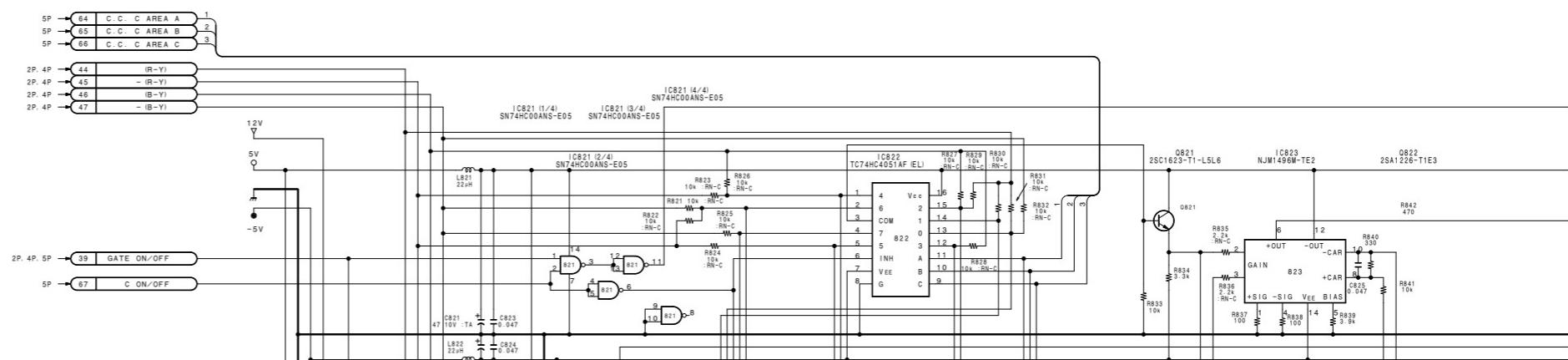
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G

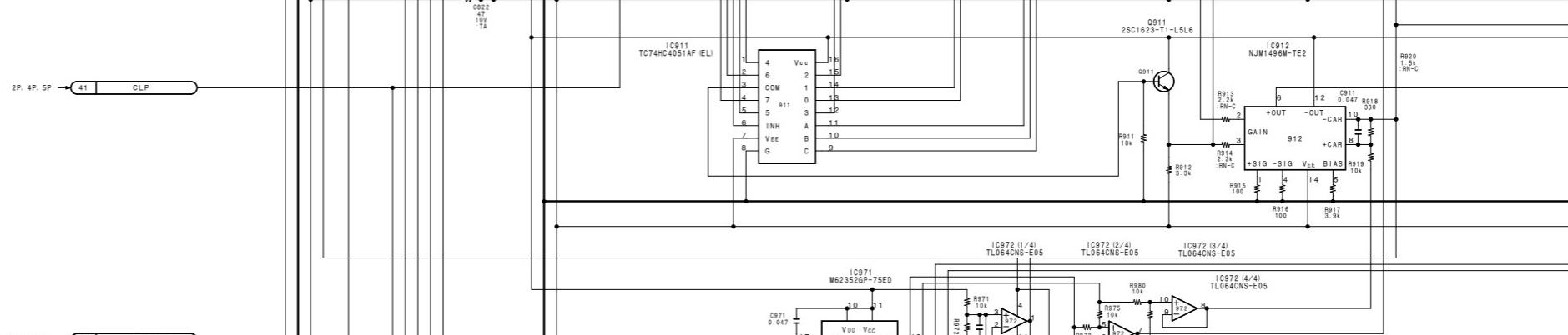
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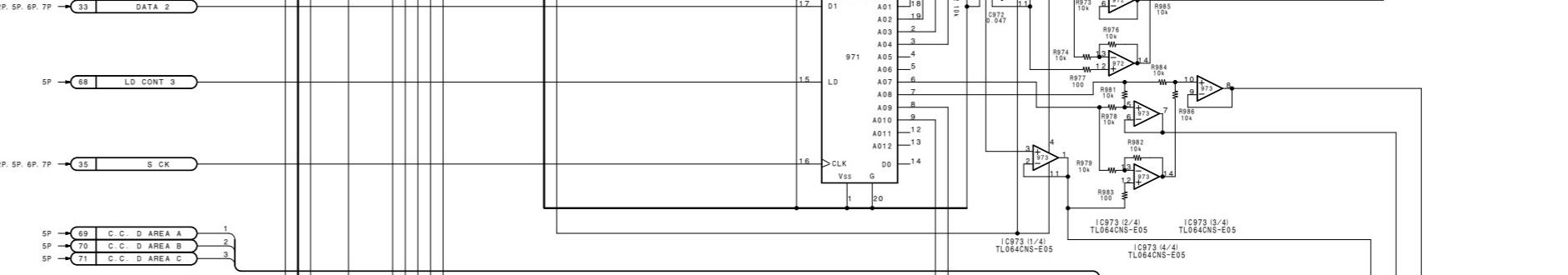
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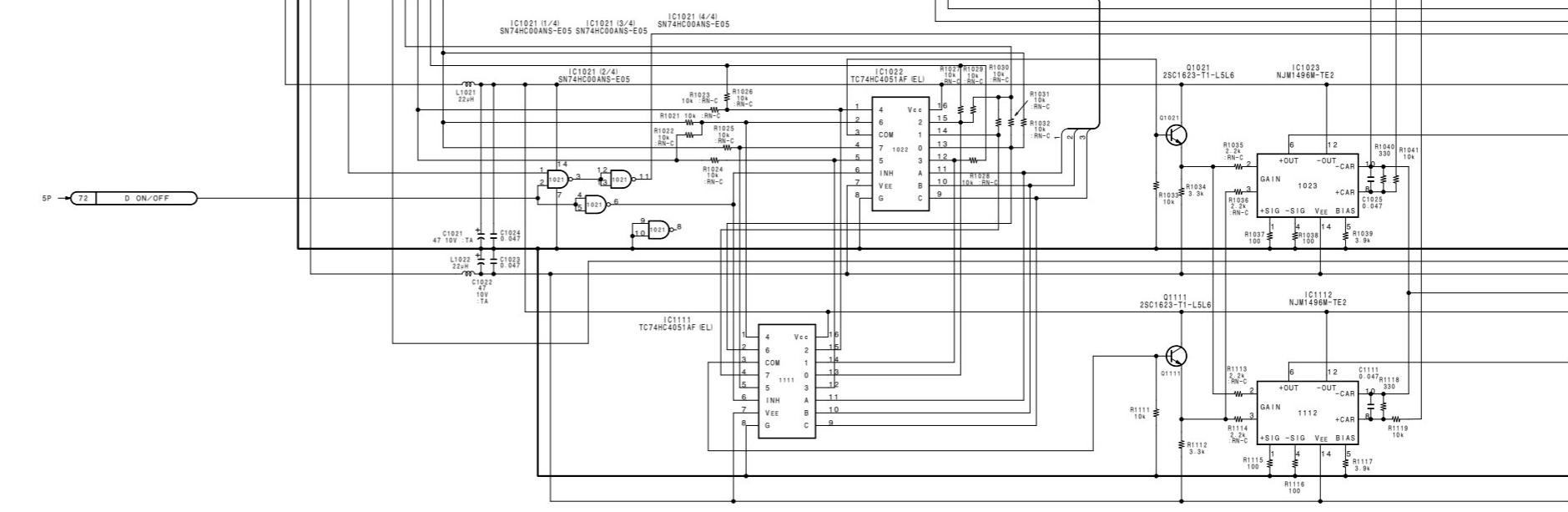
2



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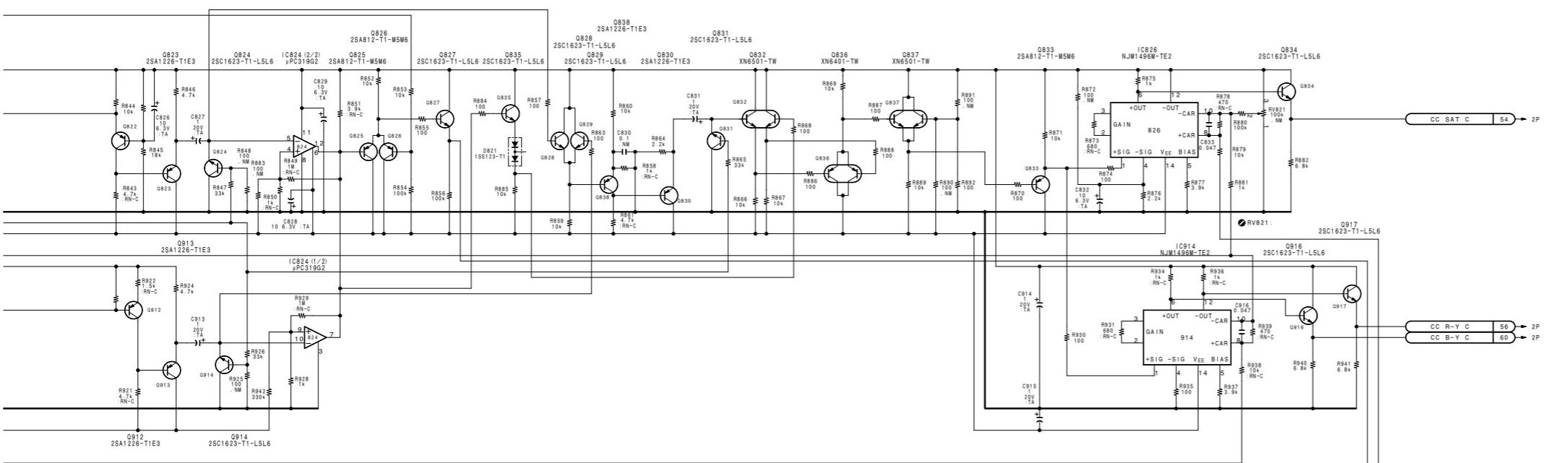
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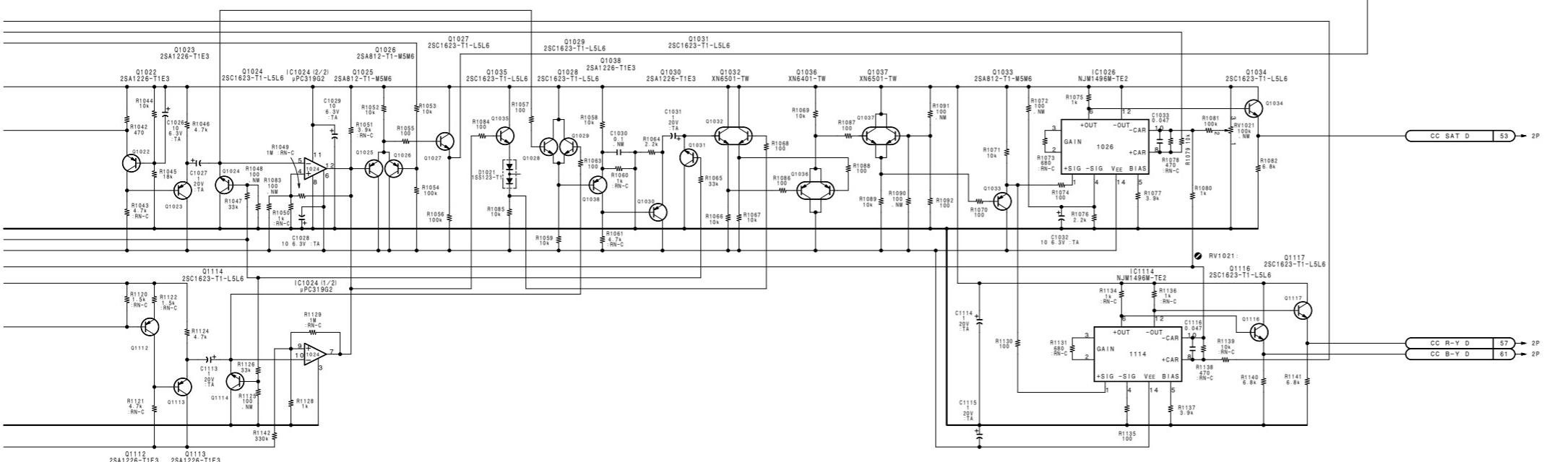
H

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6-7 (c)

6-7 (c)

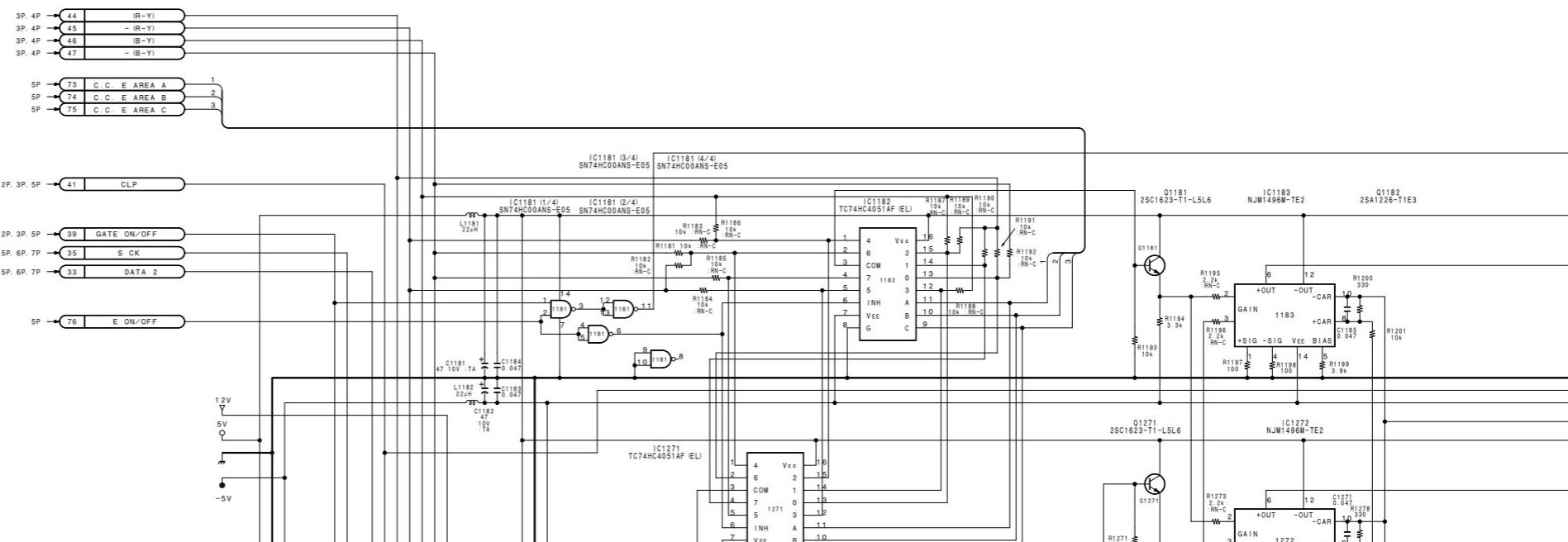
BKP-7311

1

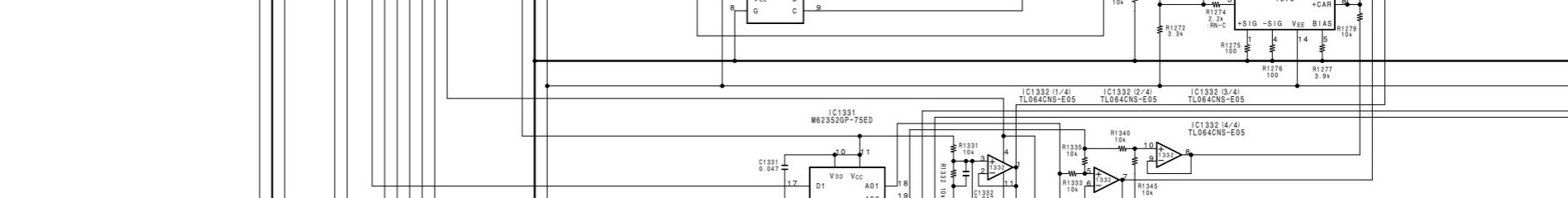
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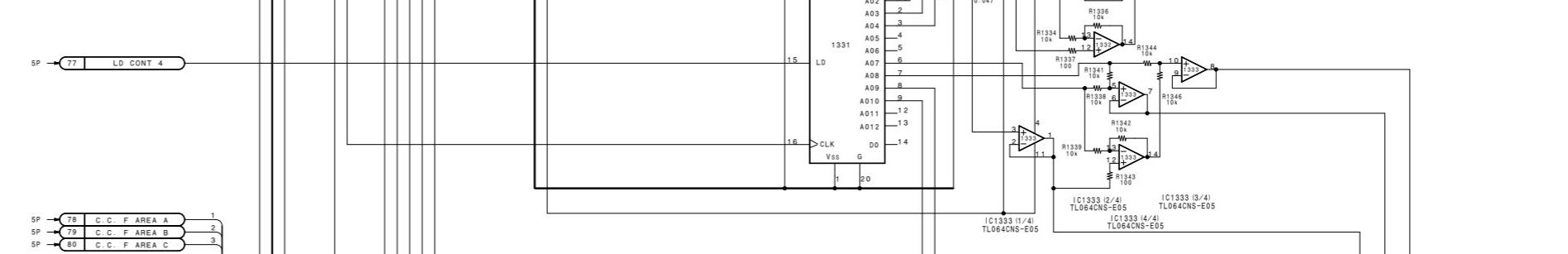
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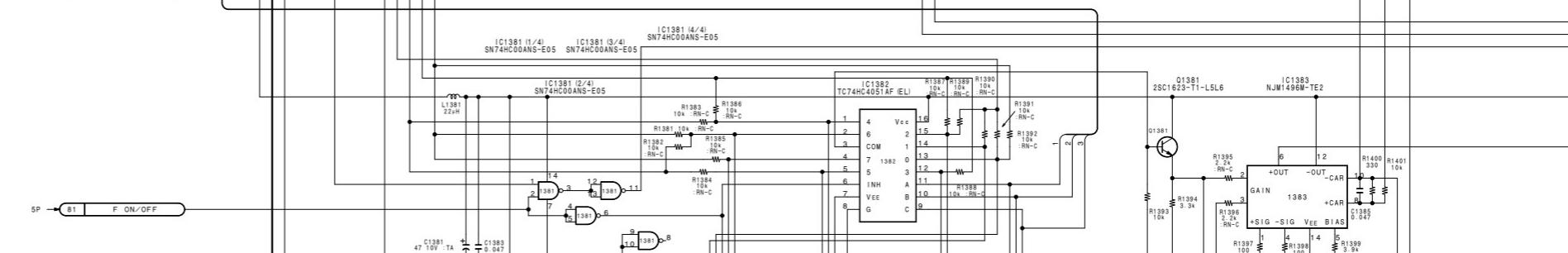
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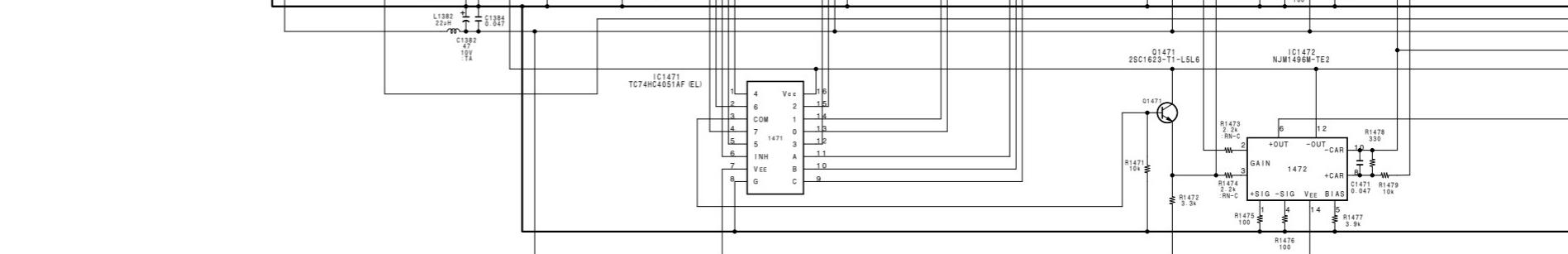
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4



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A

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C

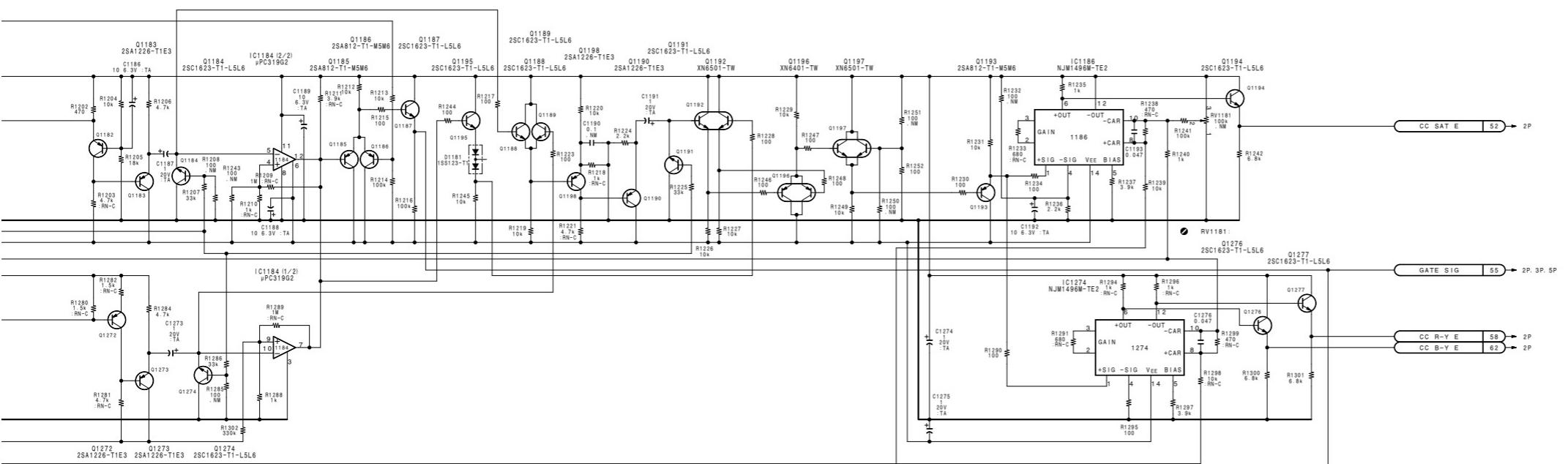
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E

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G

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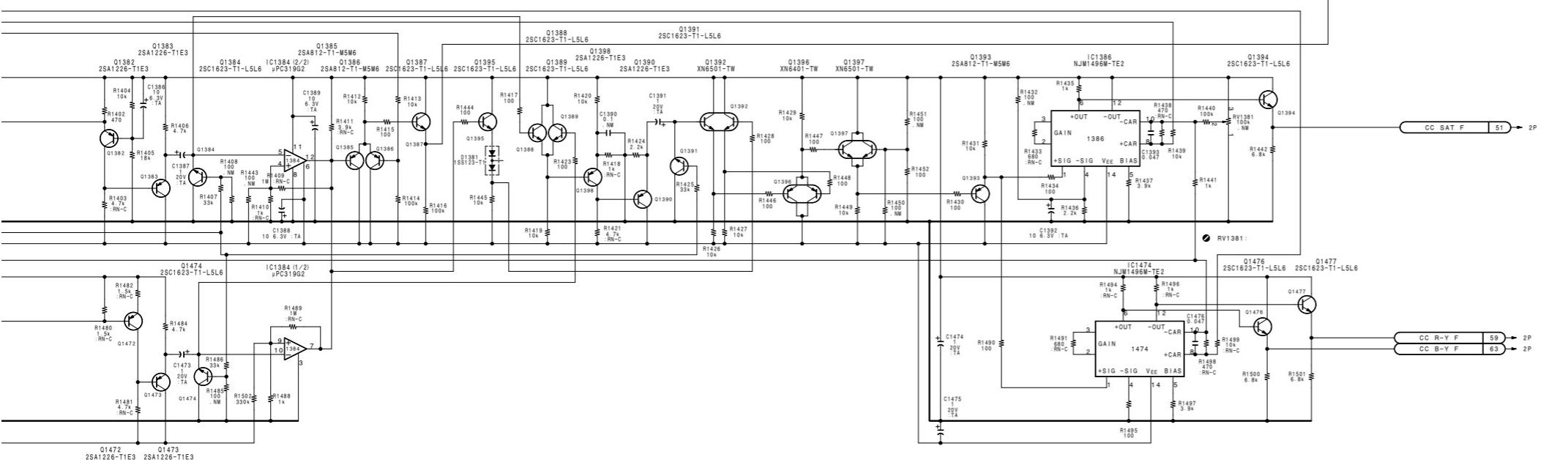
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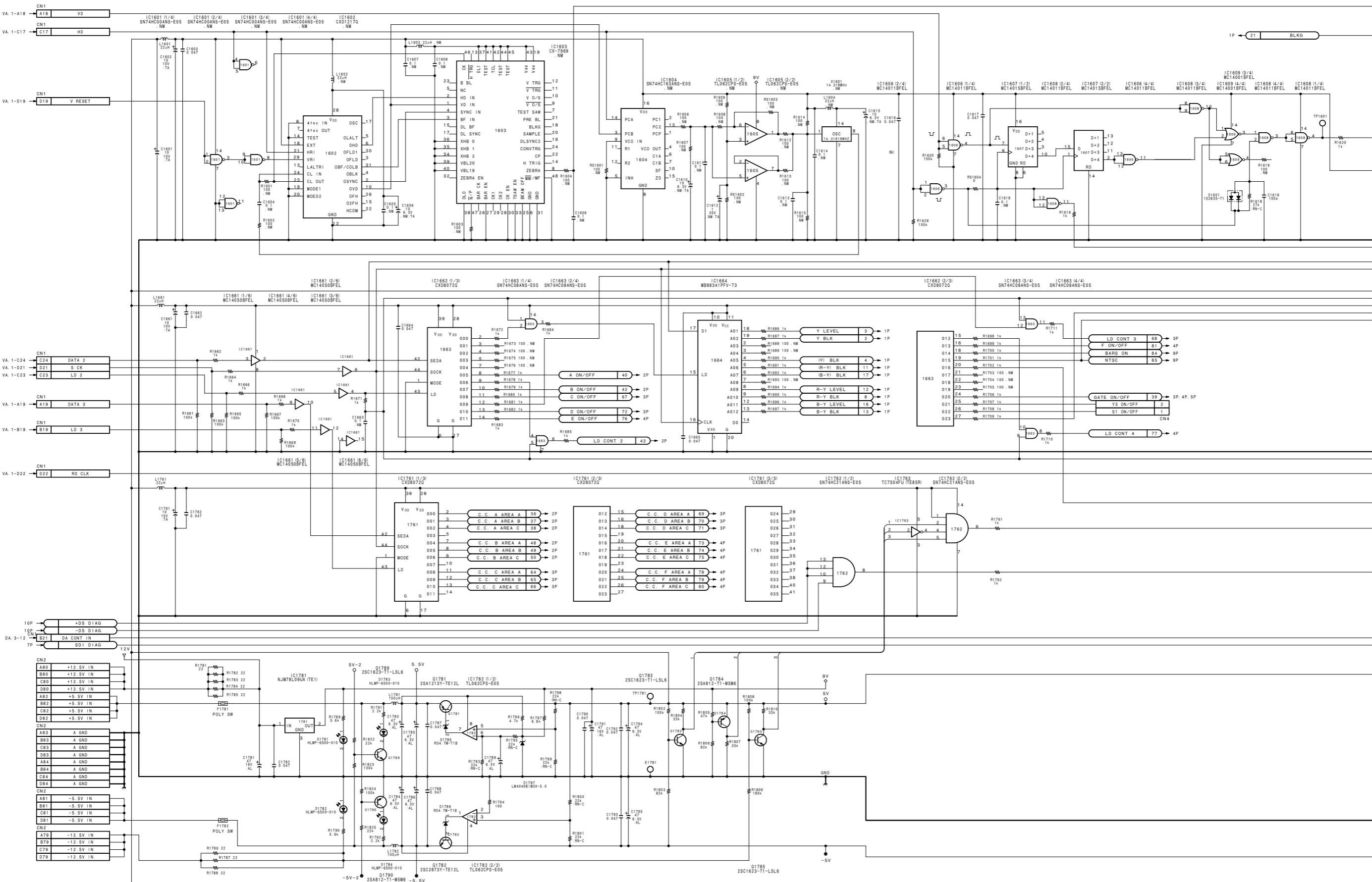
AD-117 (4/10)

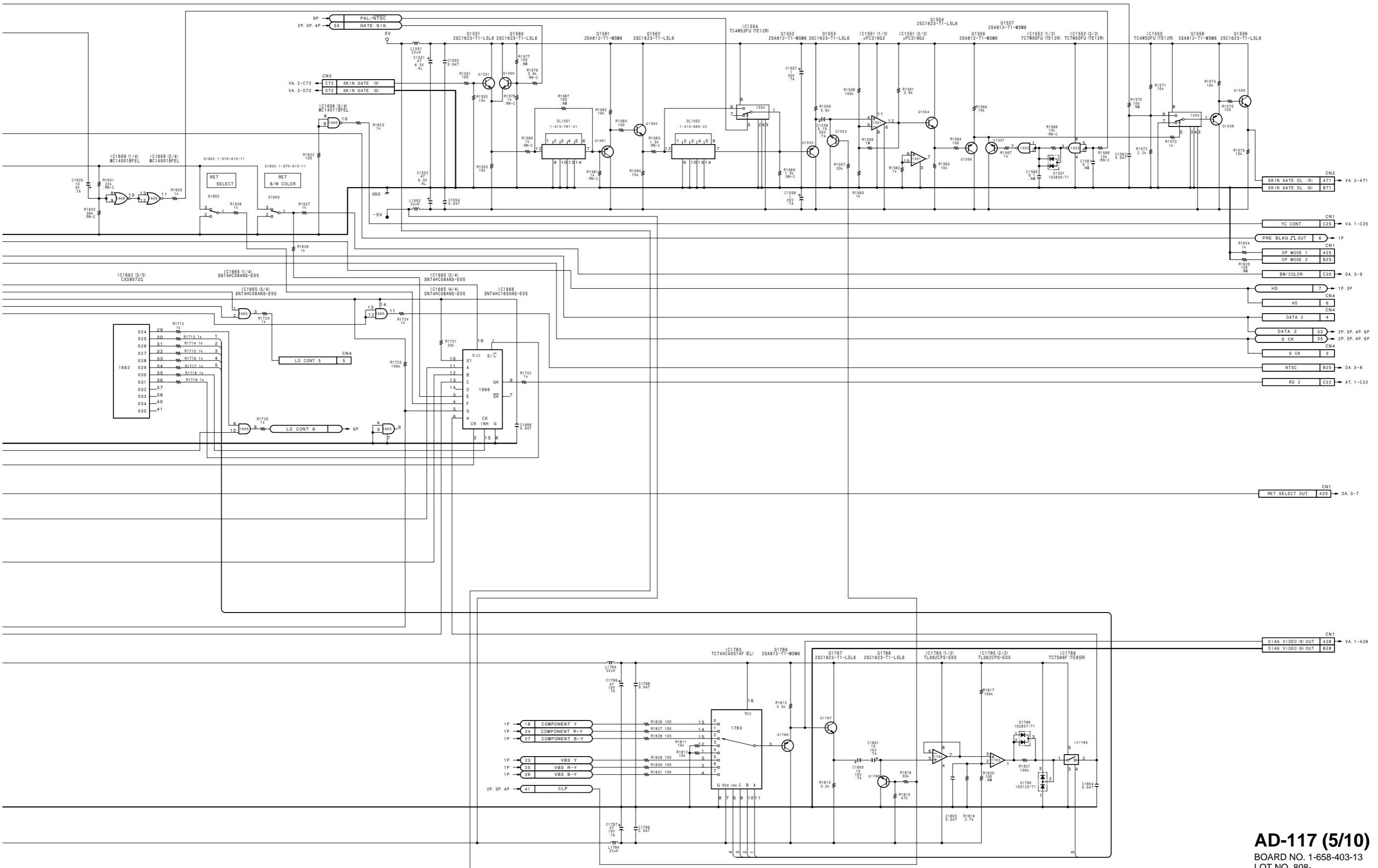
BOARD NO. 1 650-102-12

BOARD NO. 1-658-4
LOT NO. 808

LOT NO. 808-

B-BKP7311-AD117-13

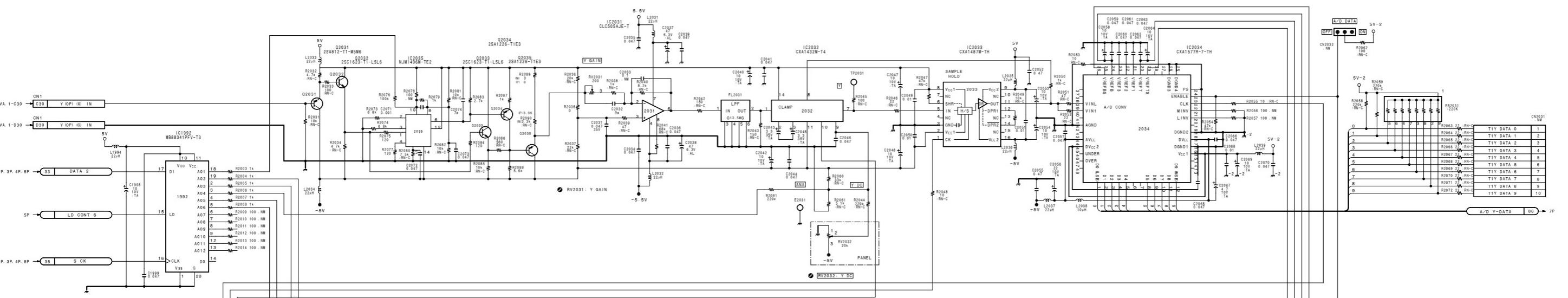




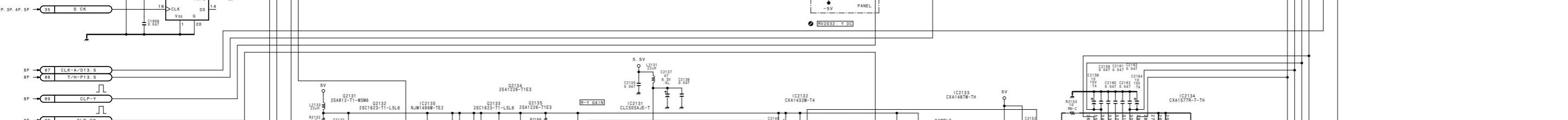
6-11 (c)

6-11 (c)

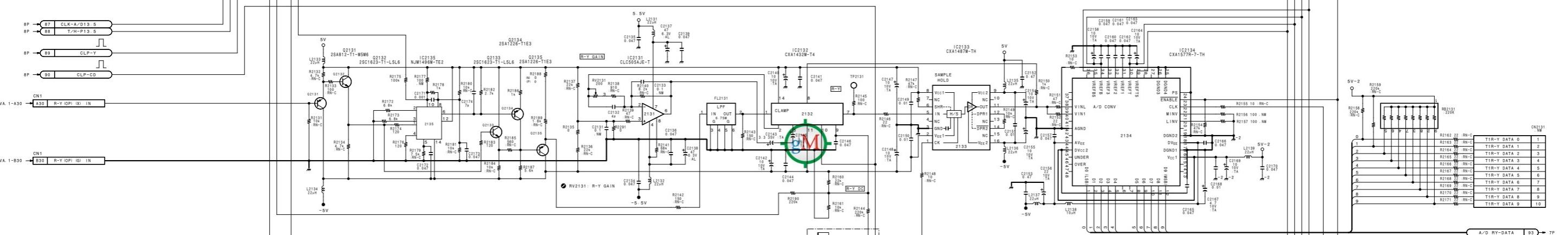
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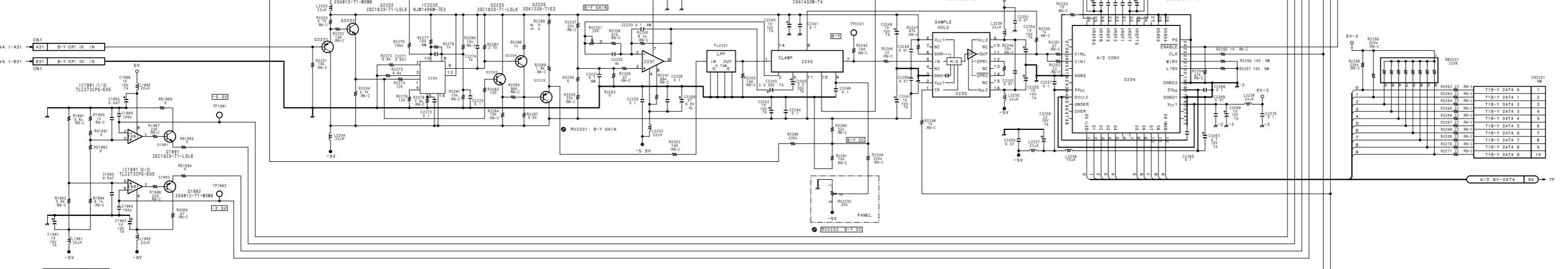
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A

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D

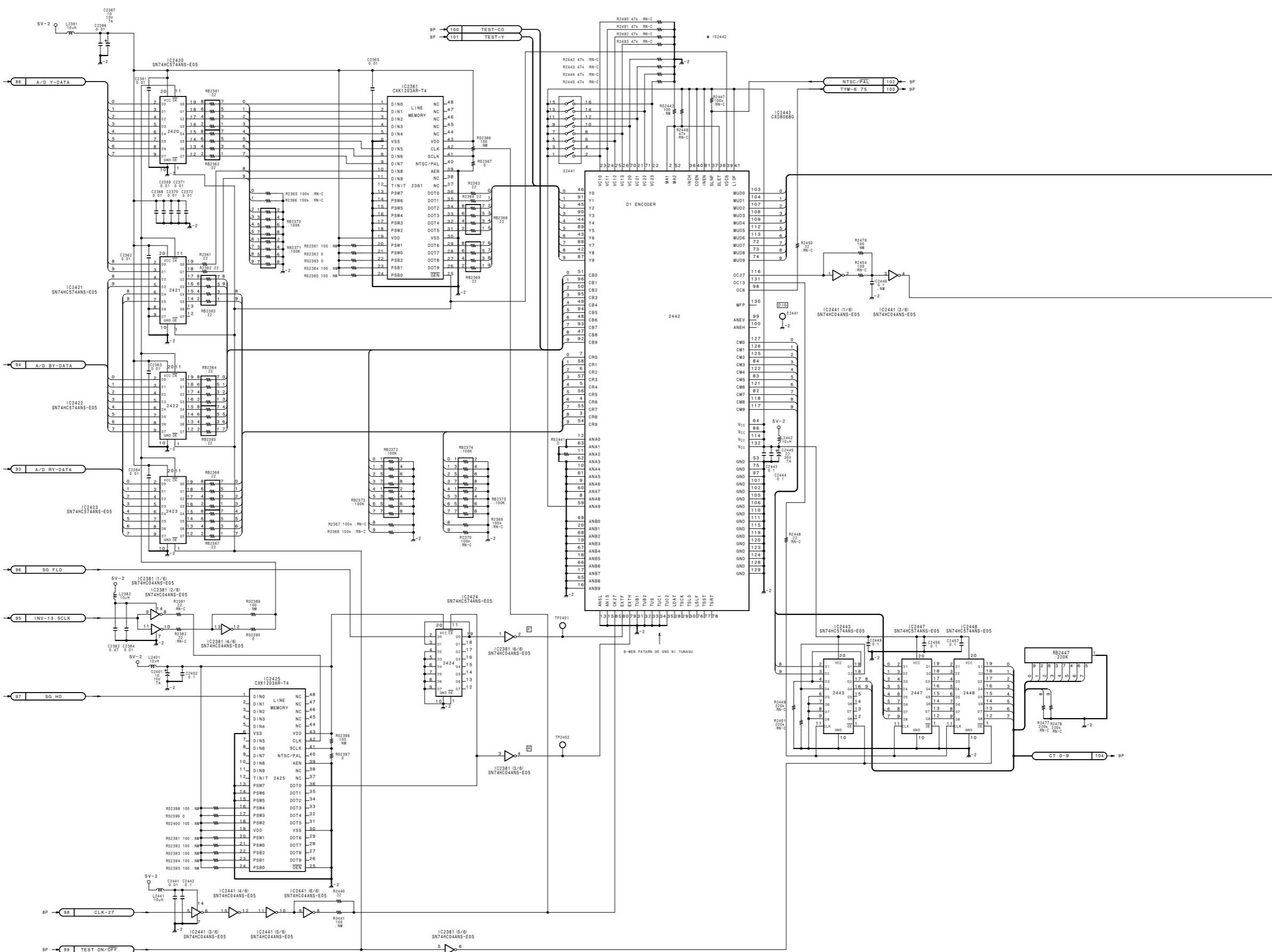
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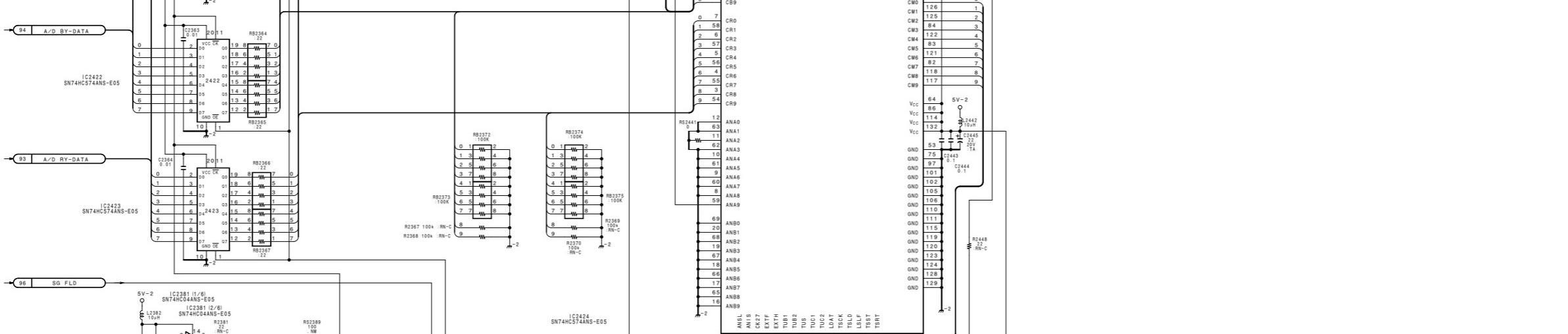
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H

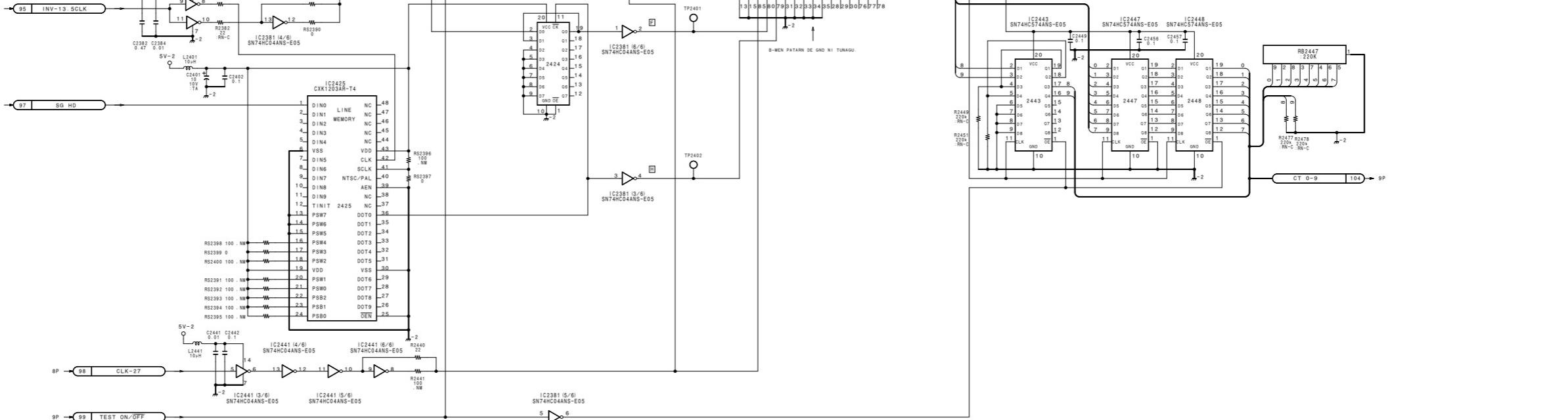
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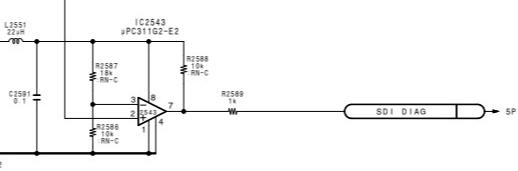
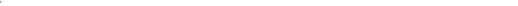
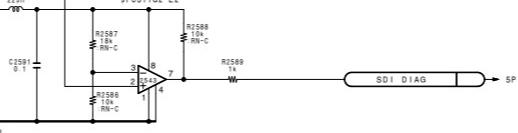
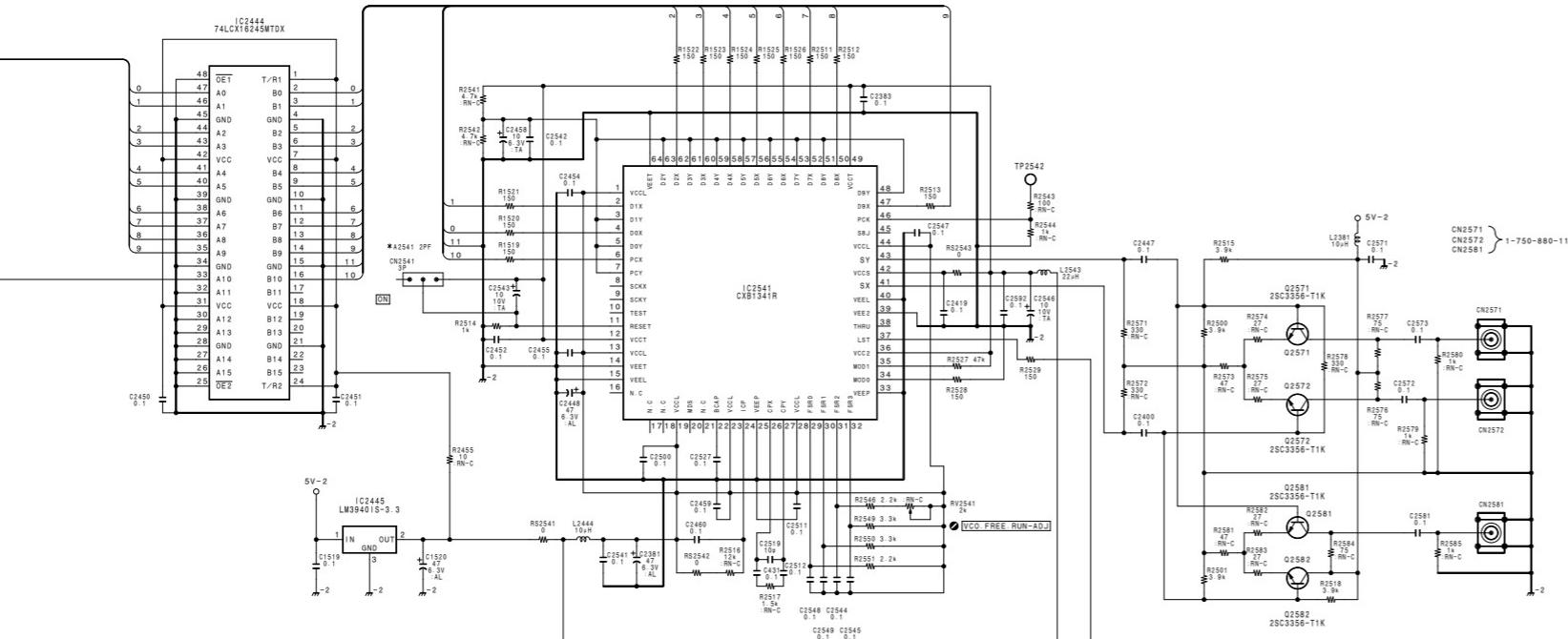
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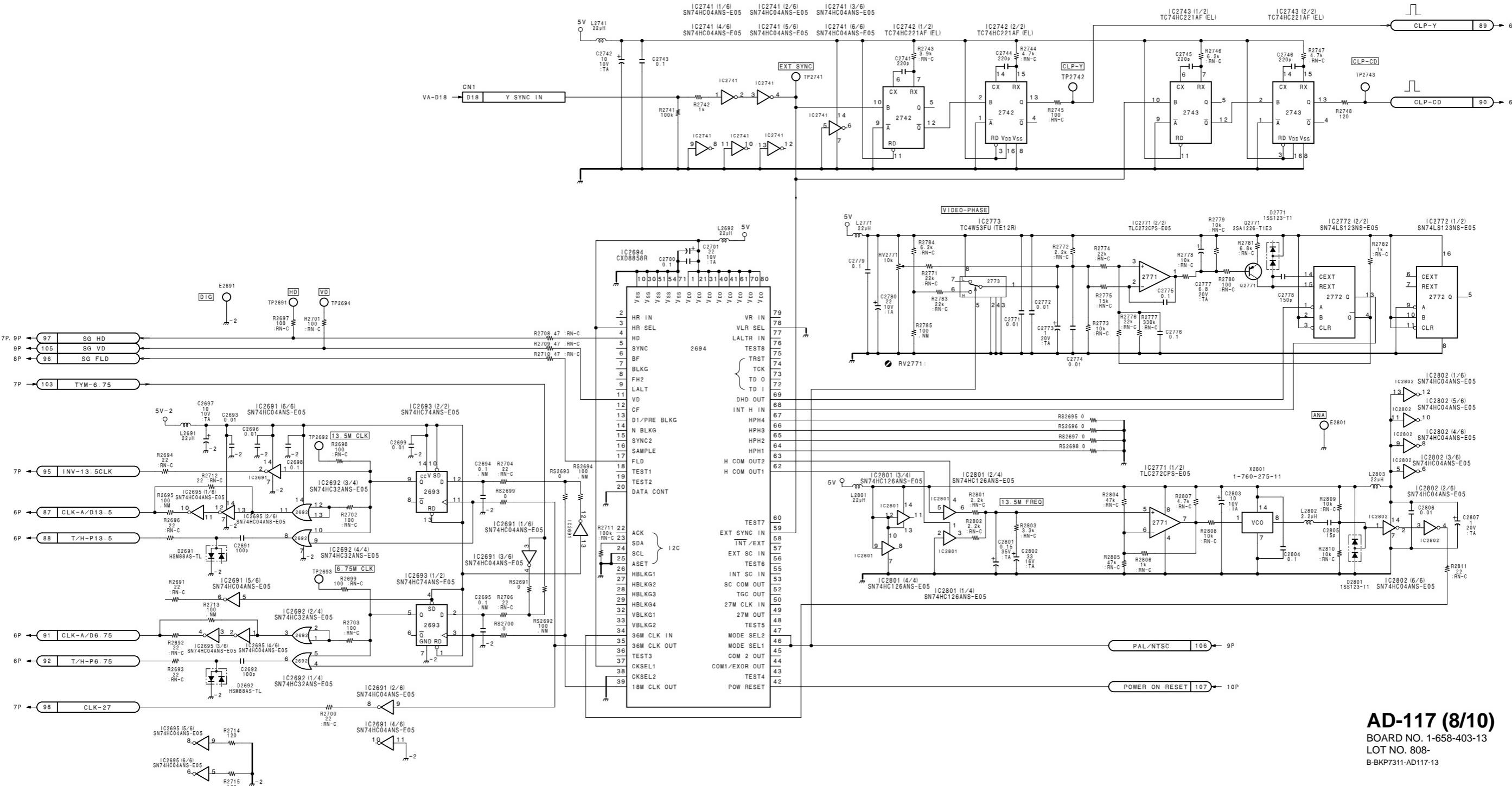
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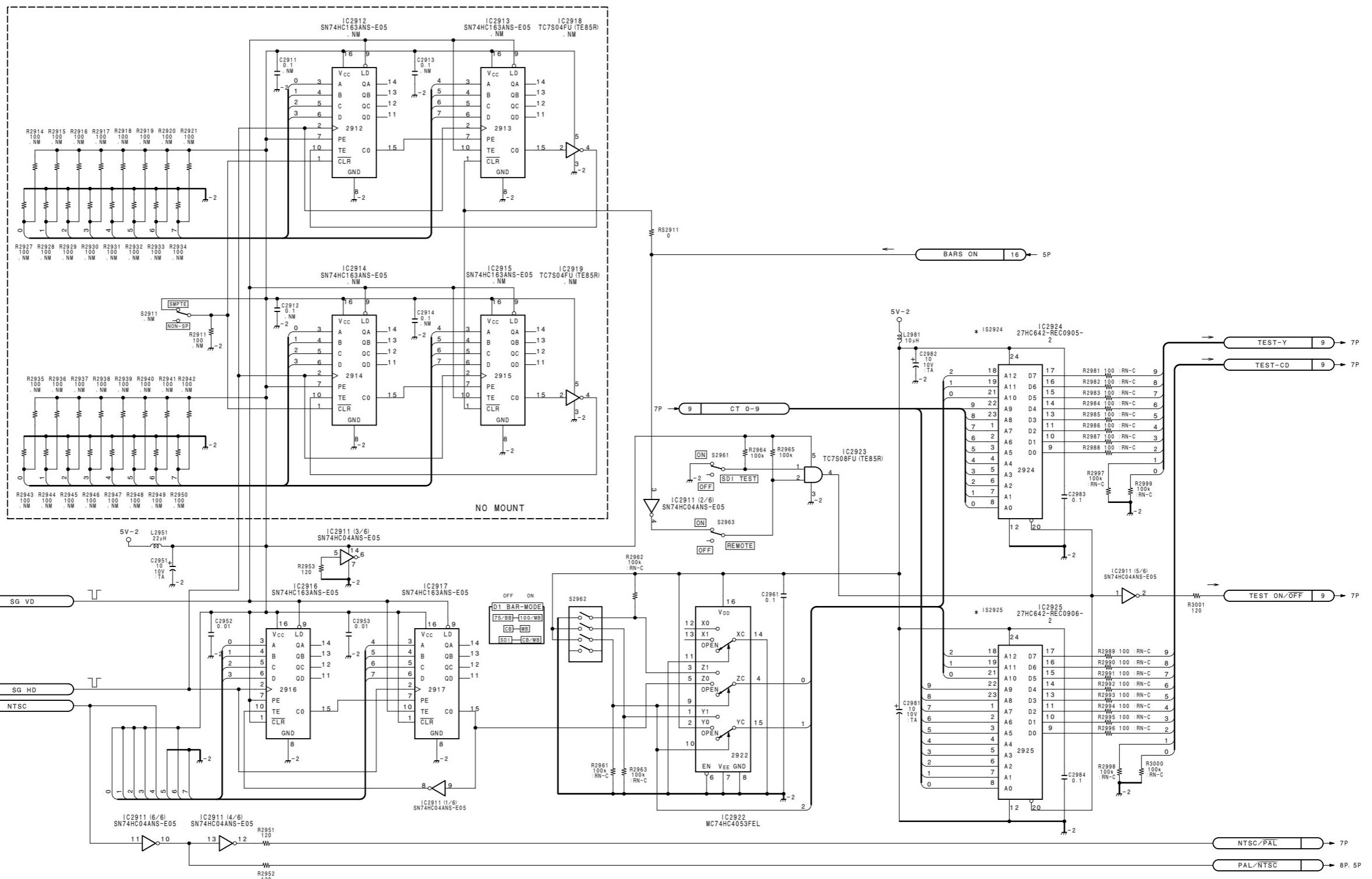


AD-117 (7/10)

BOARD NO. 1-658-403-13
LOT NO. 808-
B-BKP7311-AD117-13



AD-117 (8/10)
BOARD NO. 1-658-403-13
LOT NO. 808-
B-BKP7311-AD117-13



AD-117 (9/10)

BOARD NO. 1-658-403-13
LOT NO. 808-
B-BKP7311-AD117-13

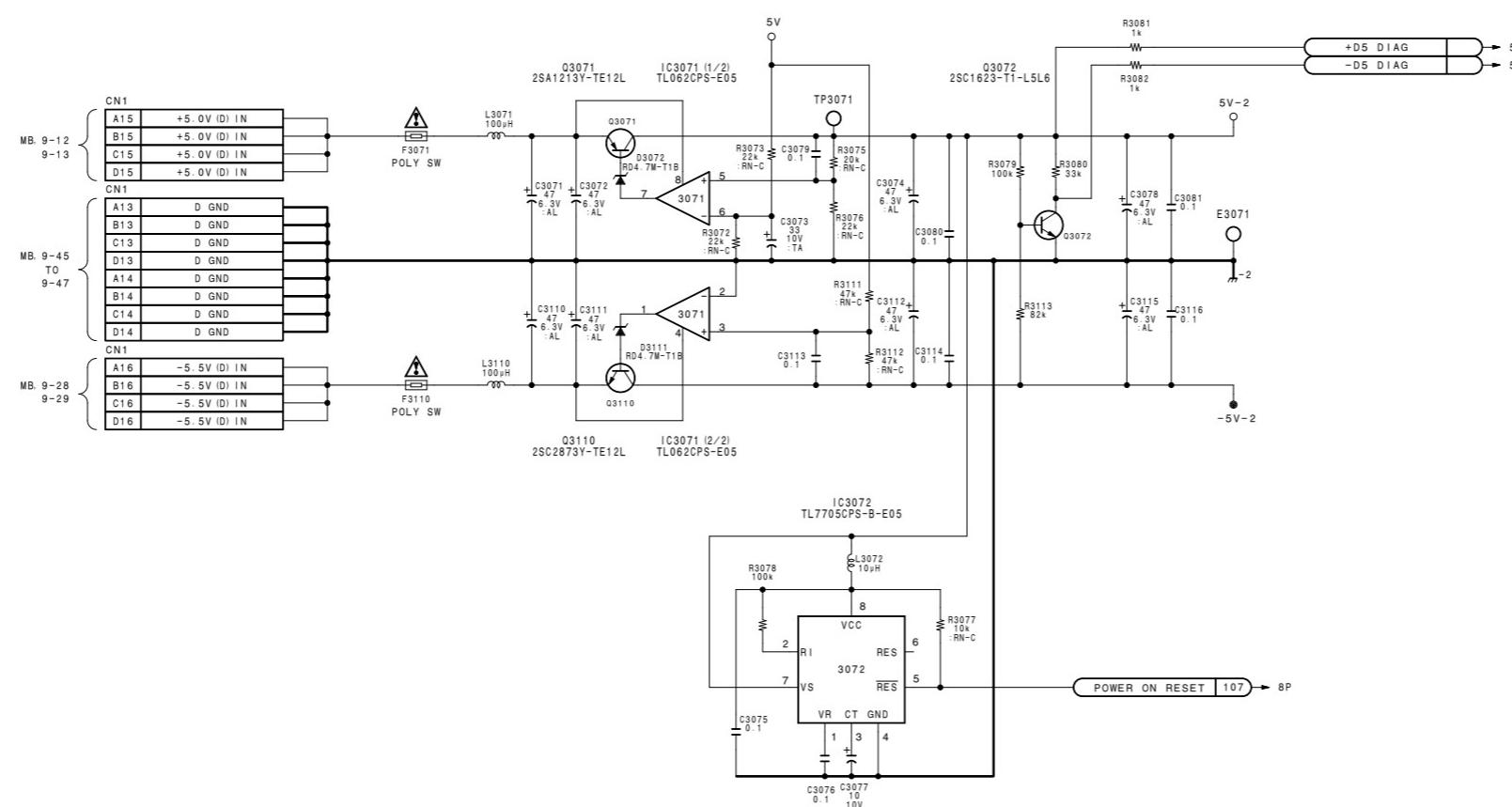
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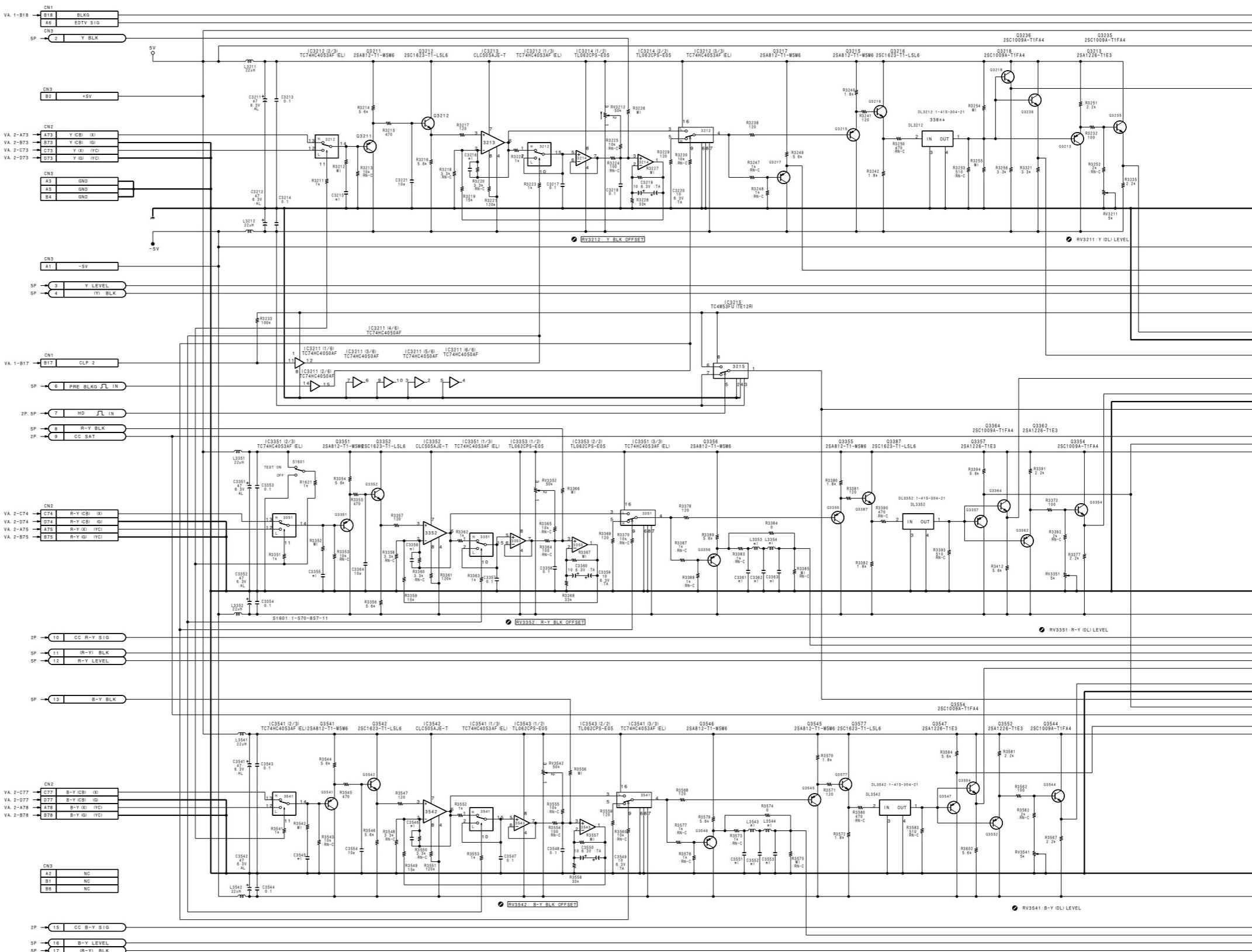
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**AD-117 (10/10)**

BOARD NO. 1-658-403-13
 LOT NO. 808-
 B-BKP7311-AD117-13

1



2

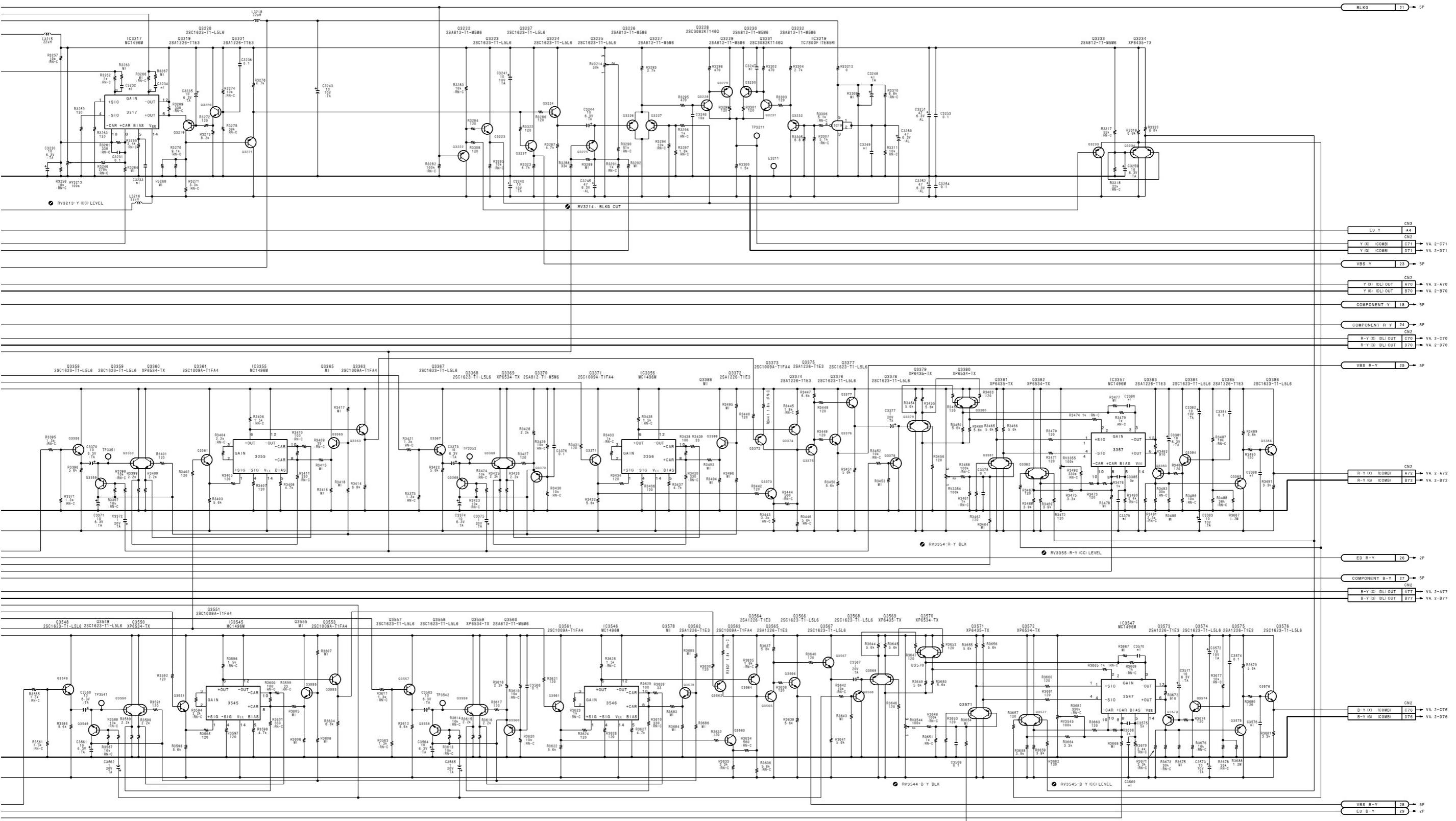
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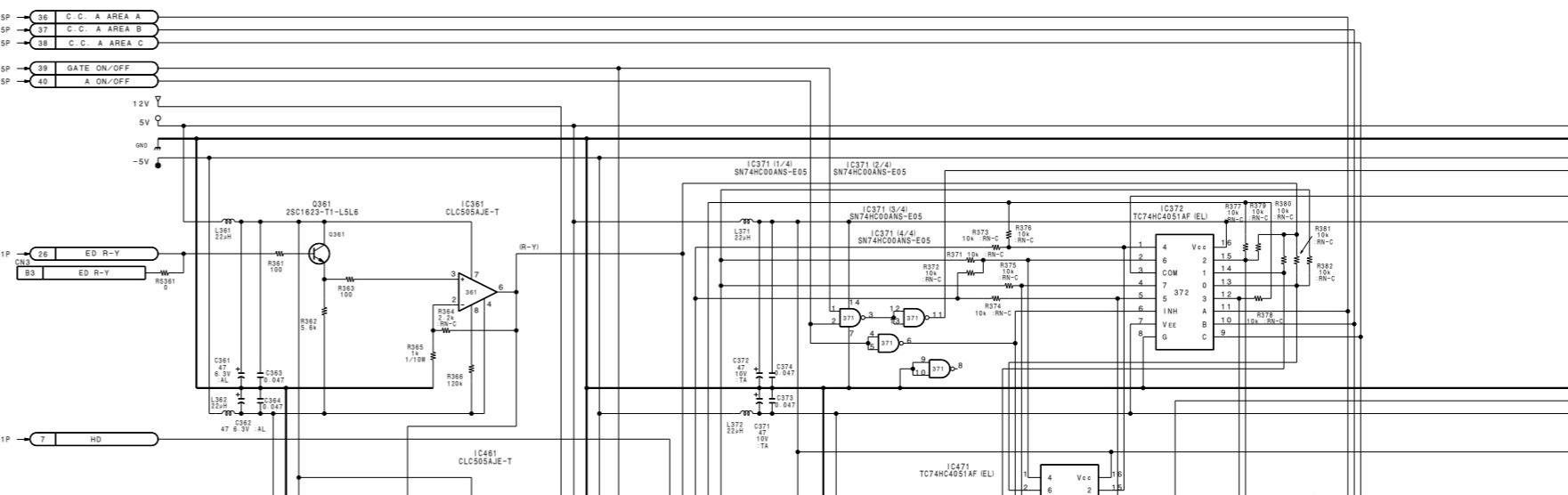
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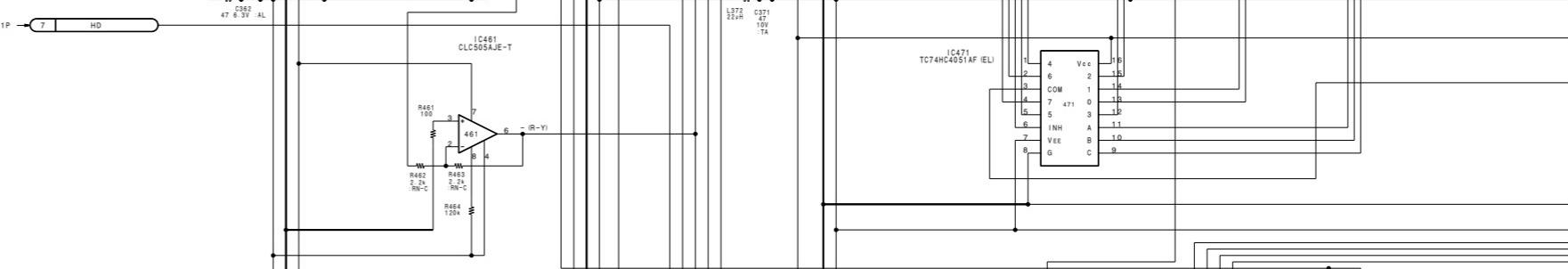
6-2 (b)



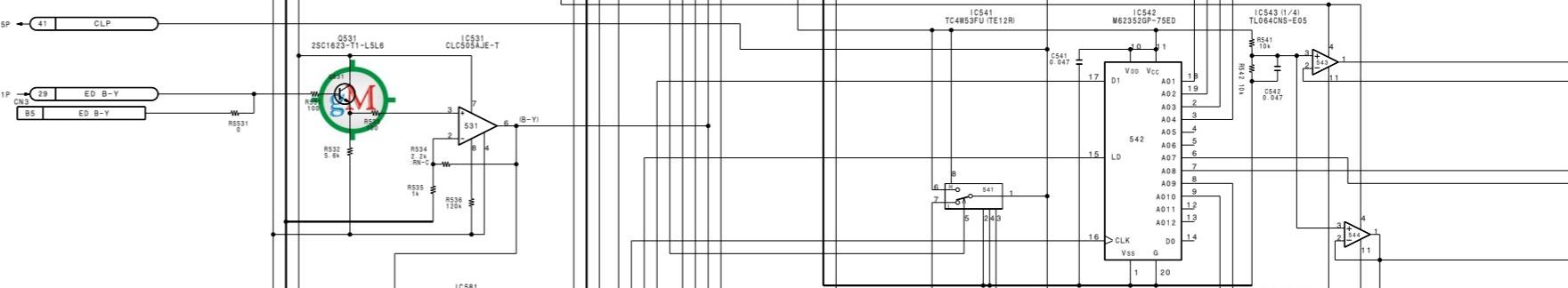
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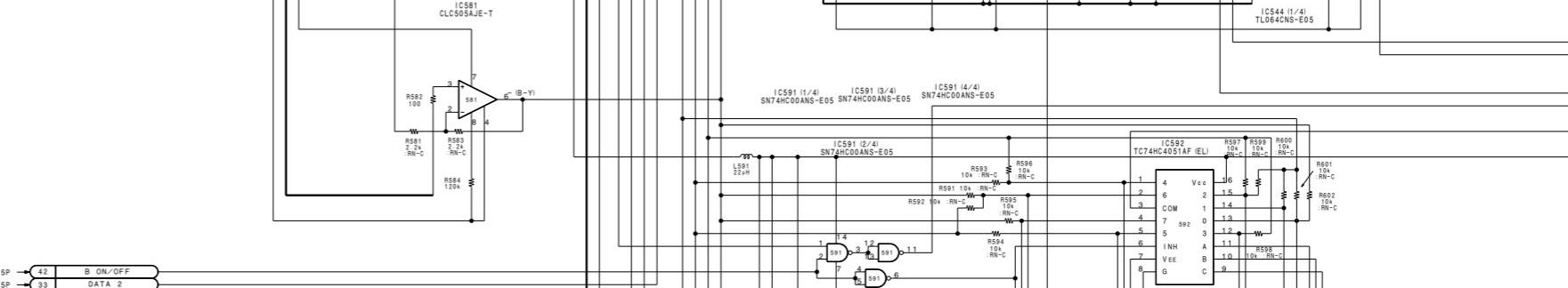
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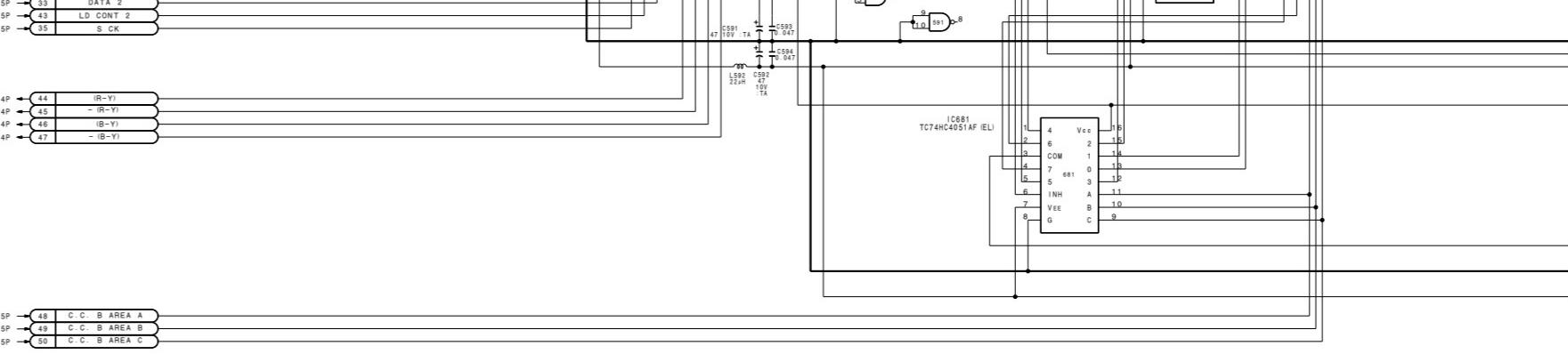
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A

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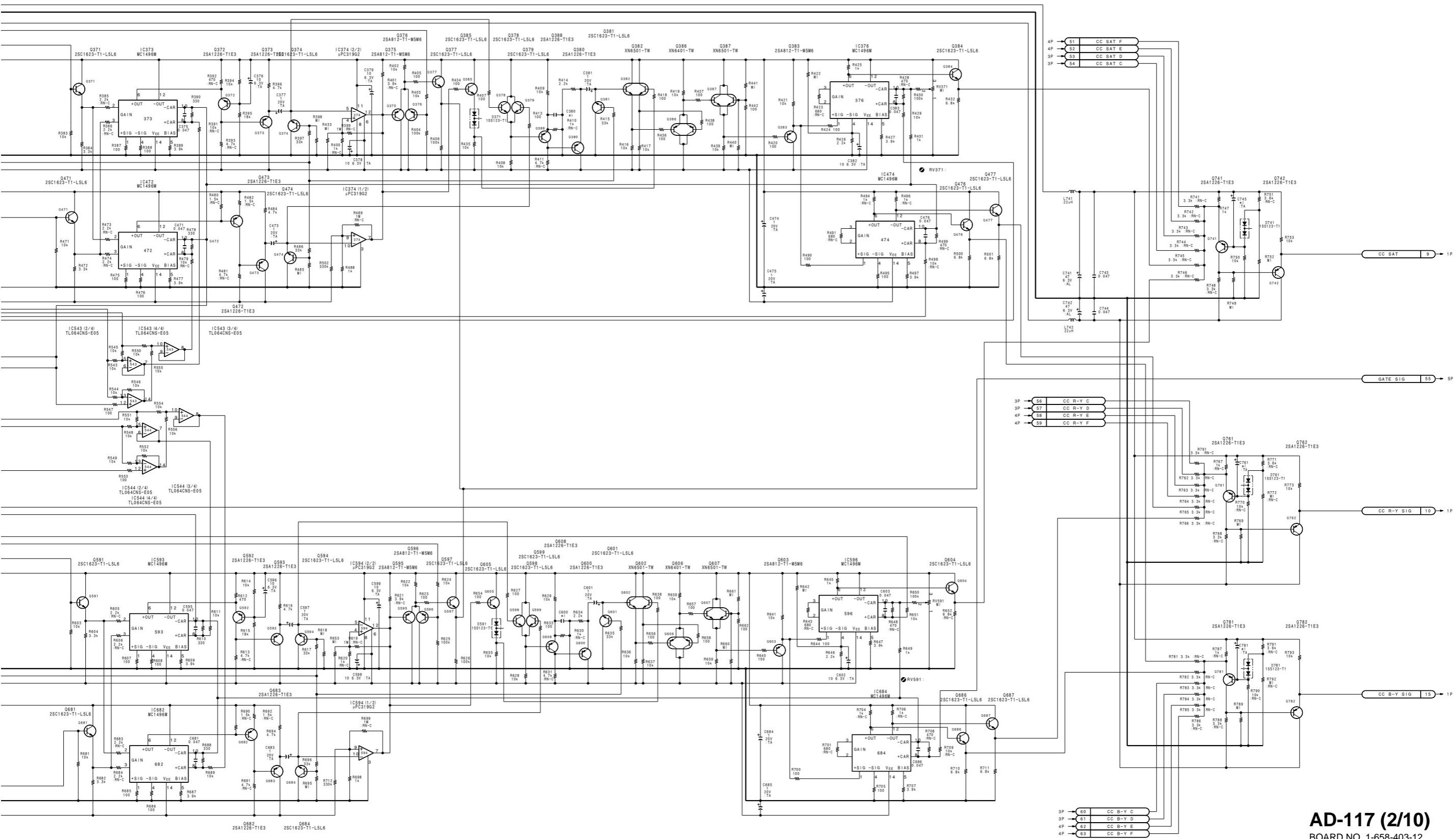
D

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6-5 (b)

6-5 (b)

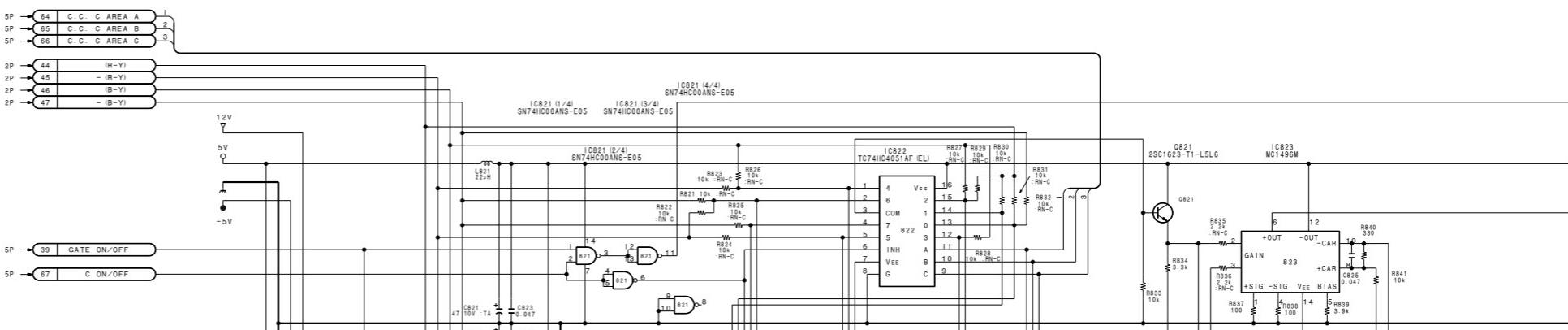
AD-117 (2/10)

BOARD NO. 1-658-403-12

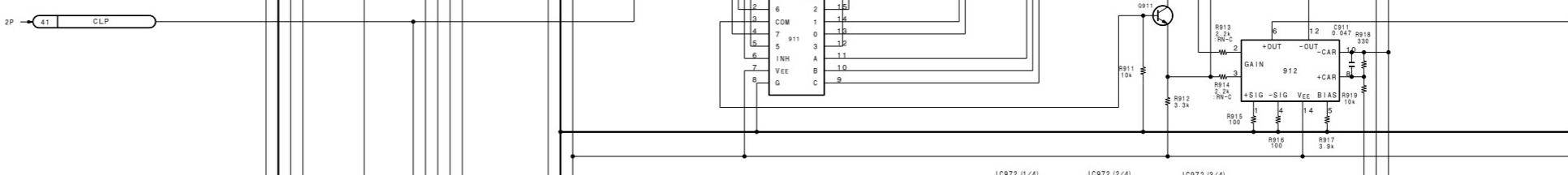
LOT NO. 701-

B-BKP7311-AD117-12

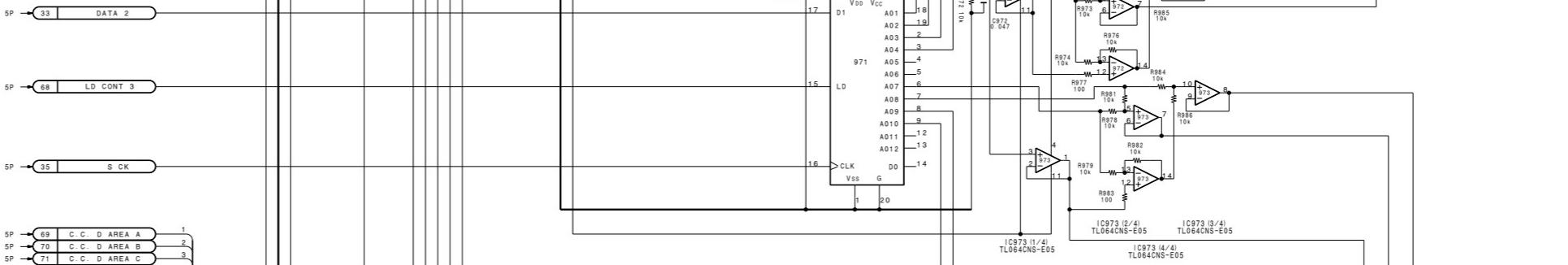
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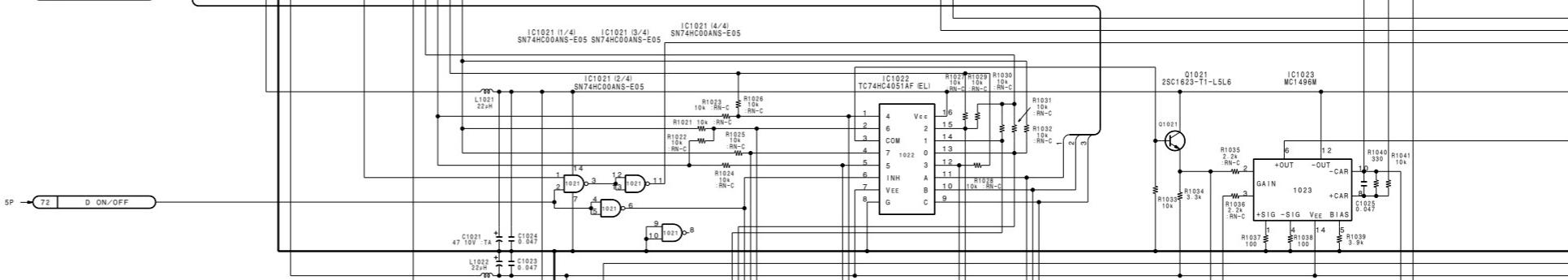
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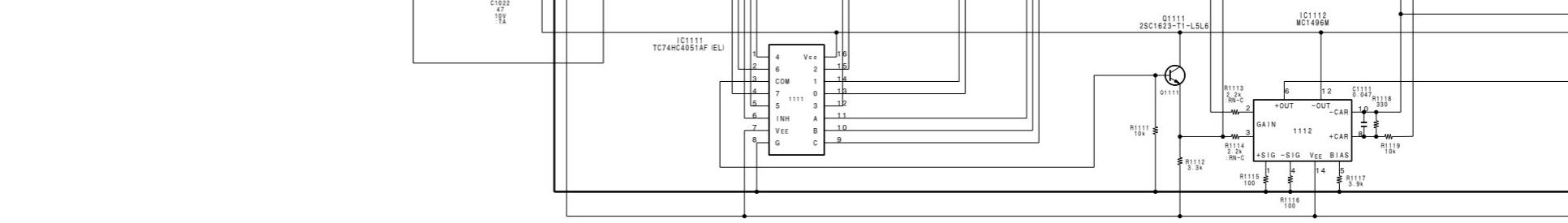
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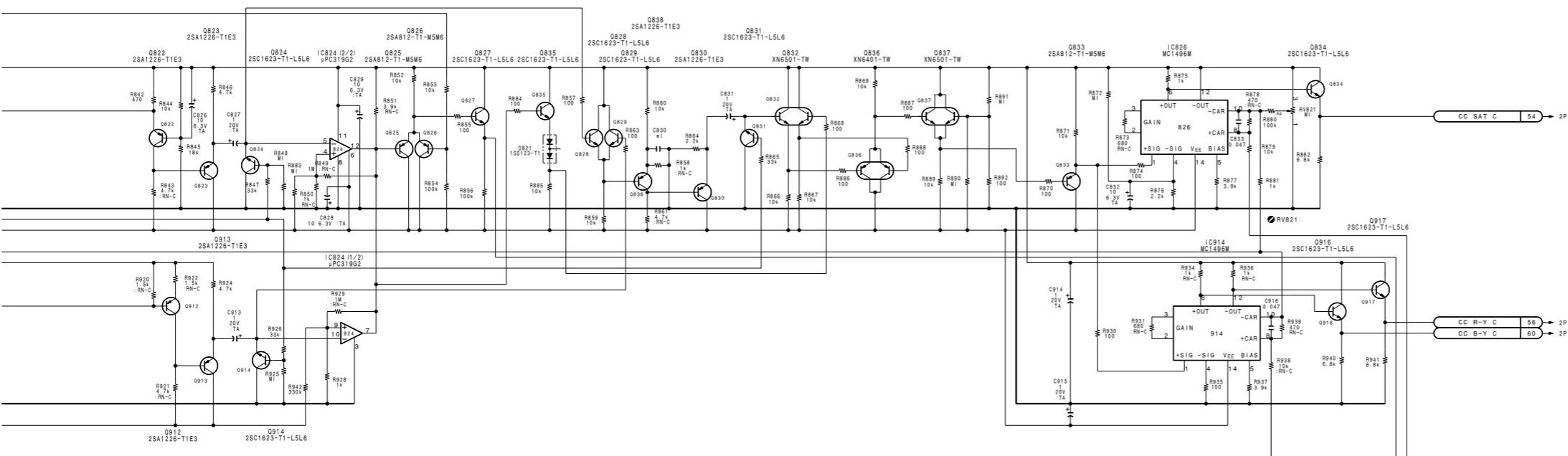


4



5





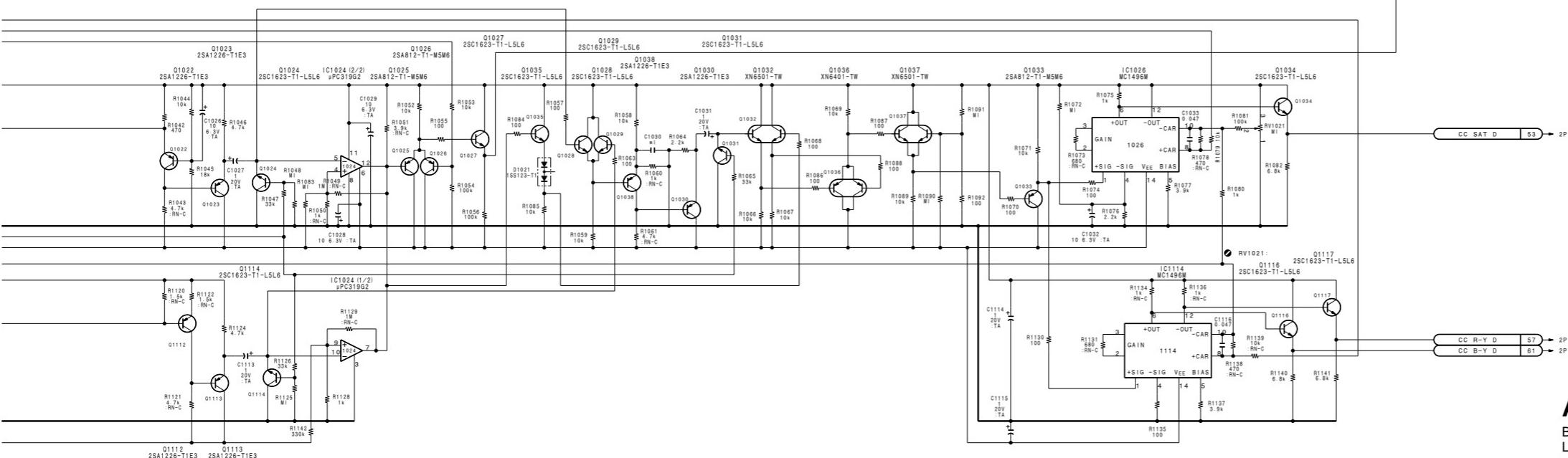
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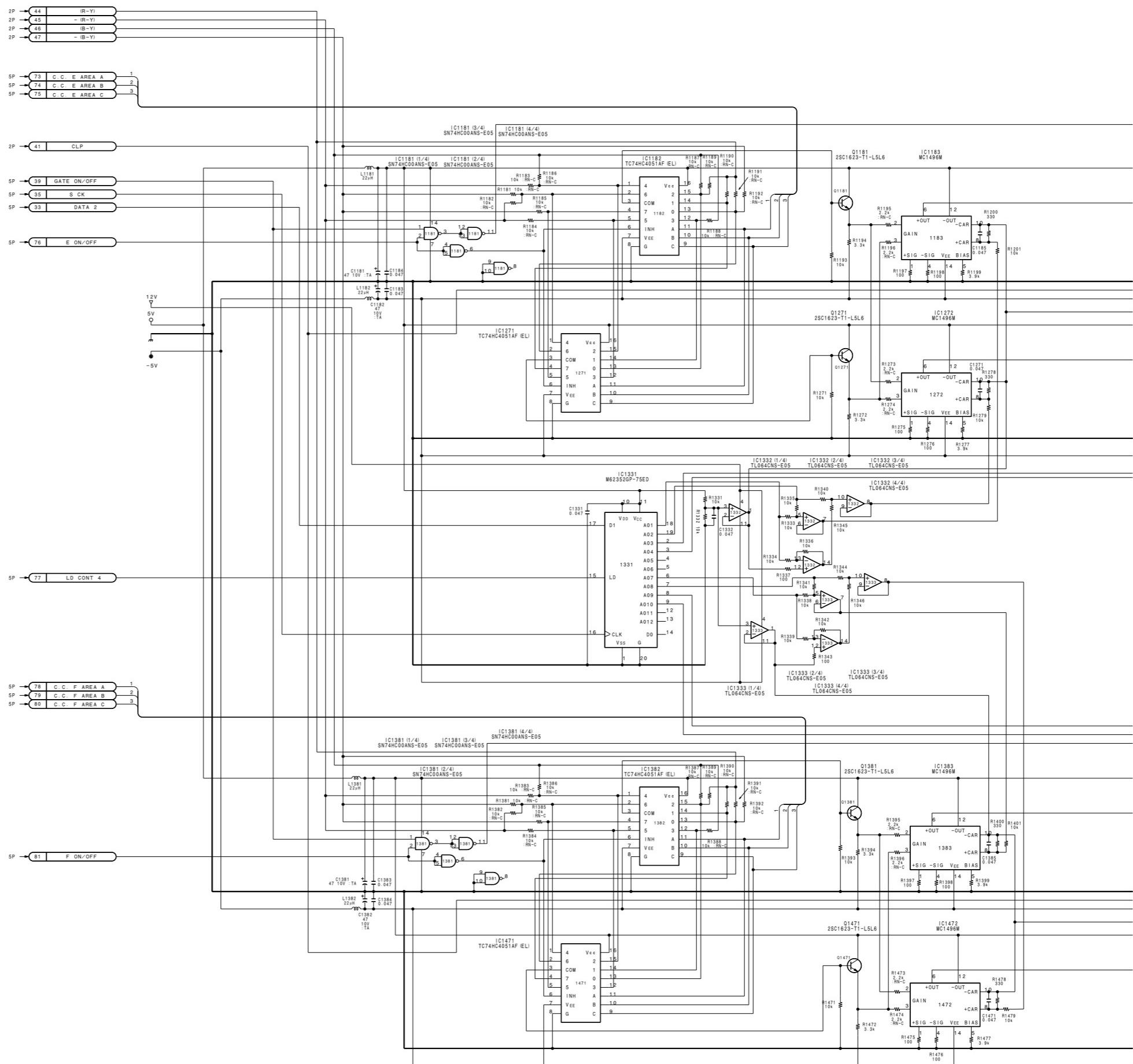


AD-117 (3/10)

BOARD NO. 1 658 403 13

BOARD NO. 1-658-4
LOT NO. 701-

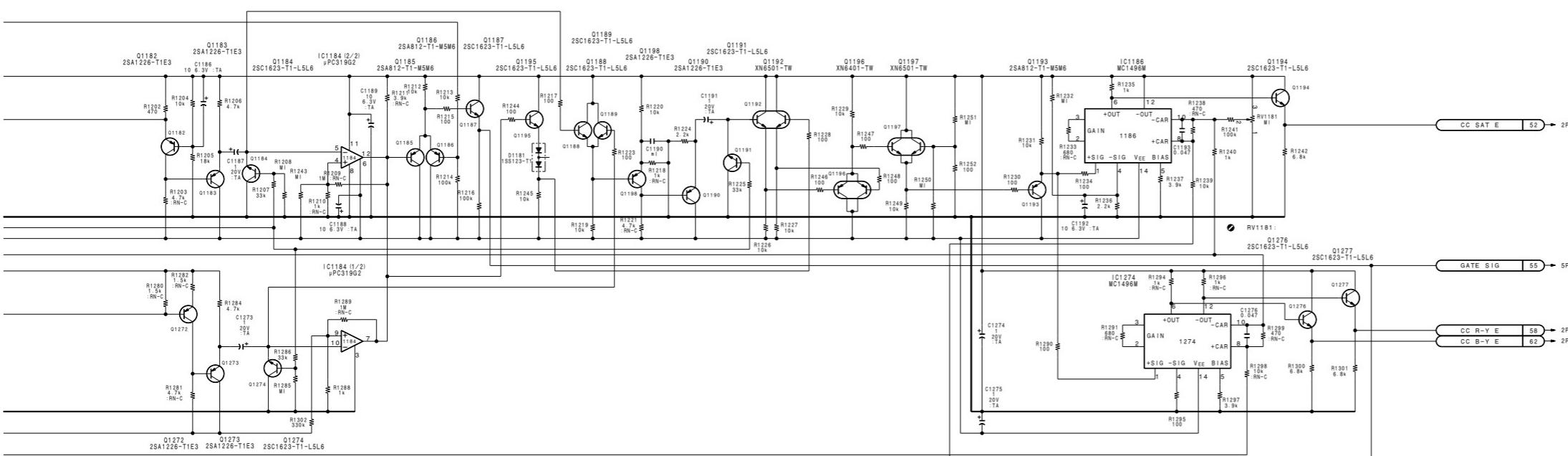
R BKBR7311 AD117-12



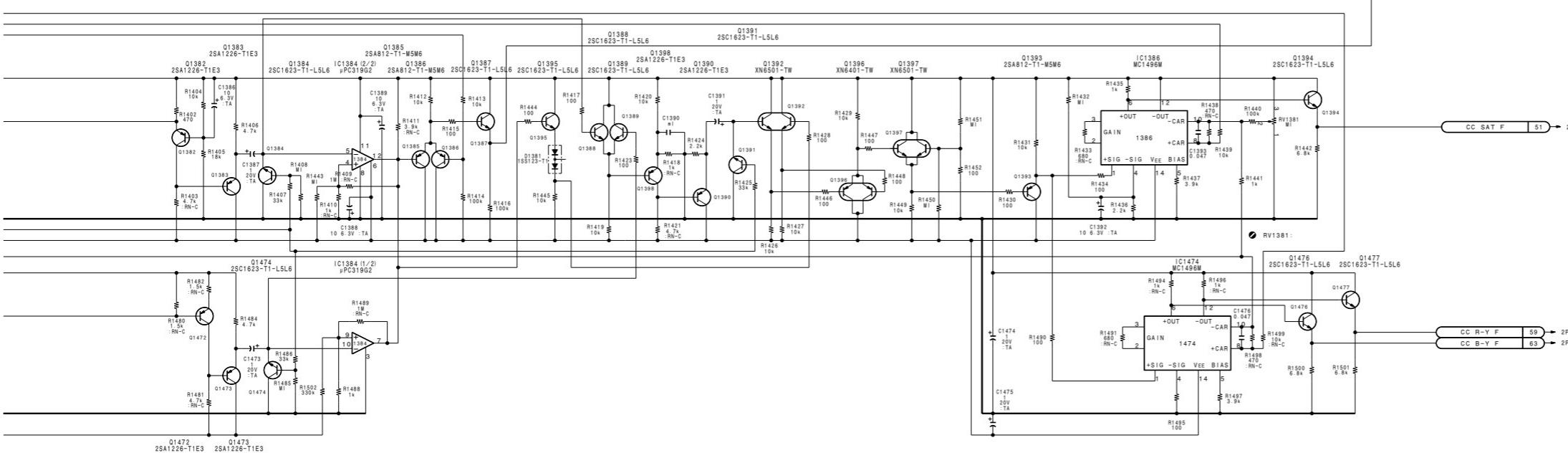
6-8 (b)

6-8 (b)

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3



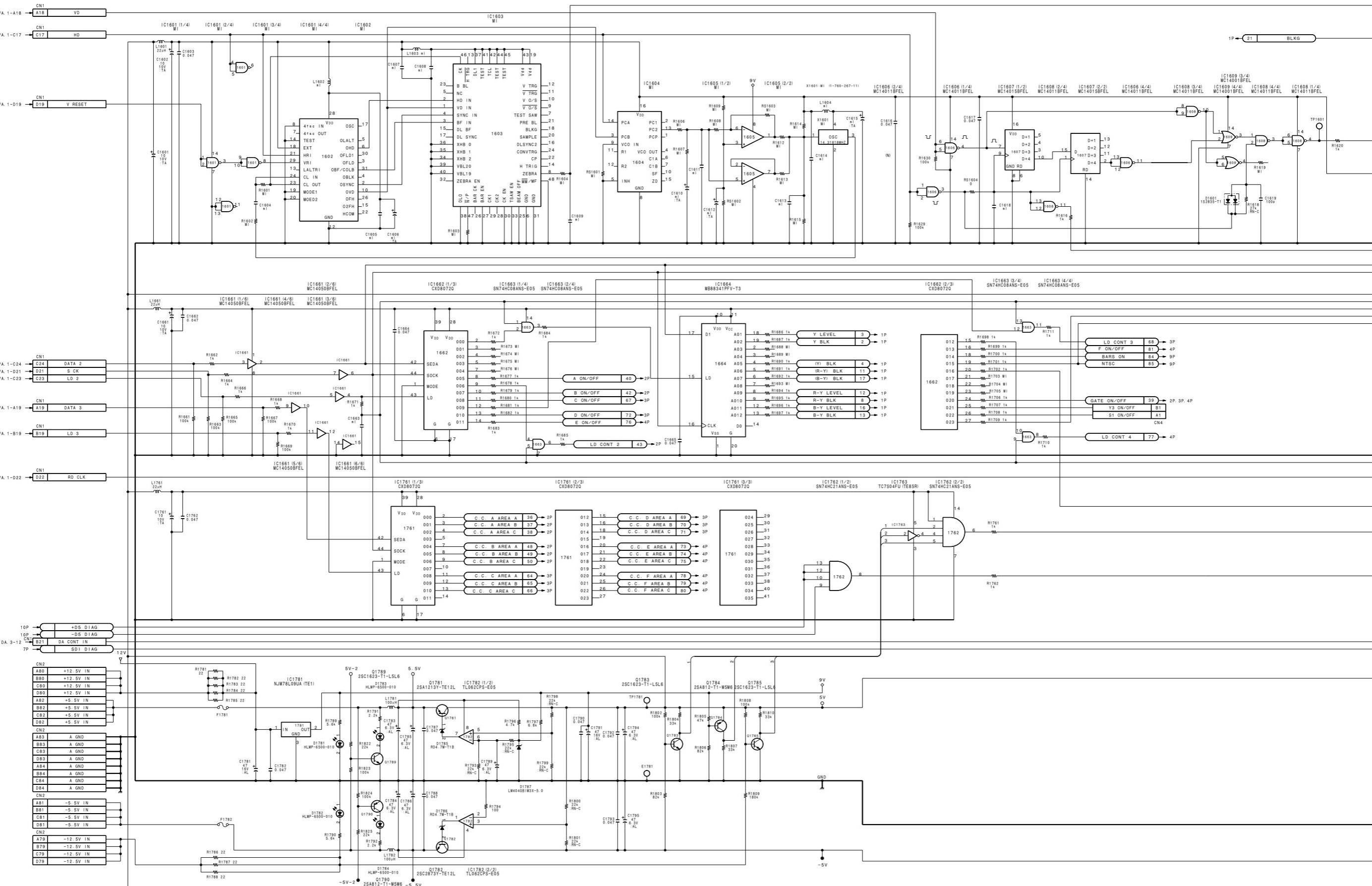
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AD-117 (4/10)

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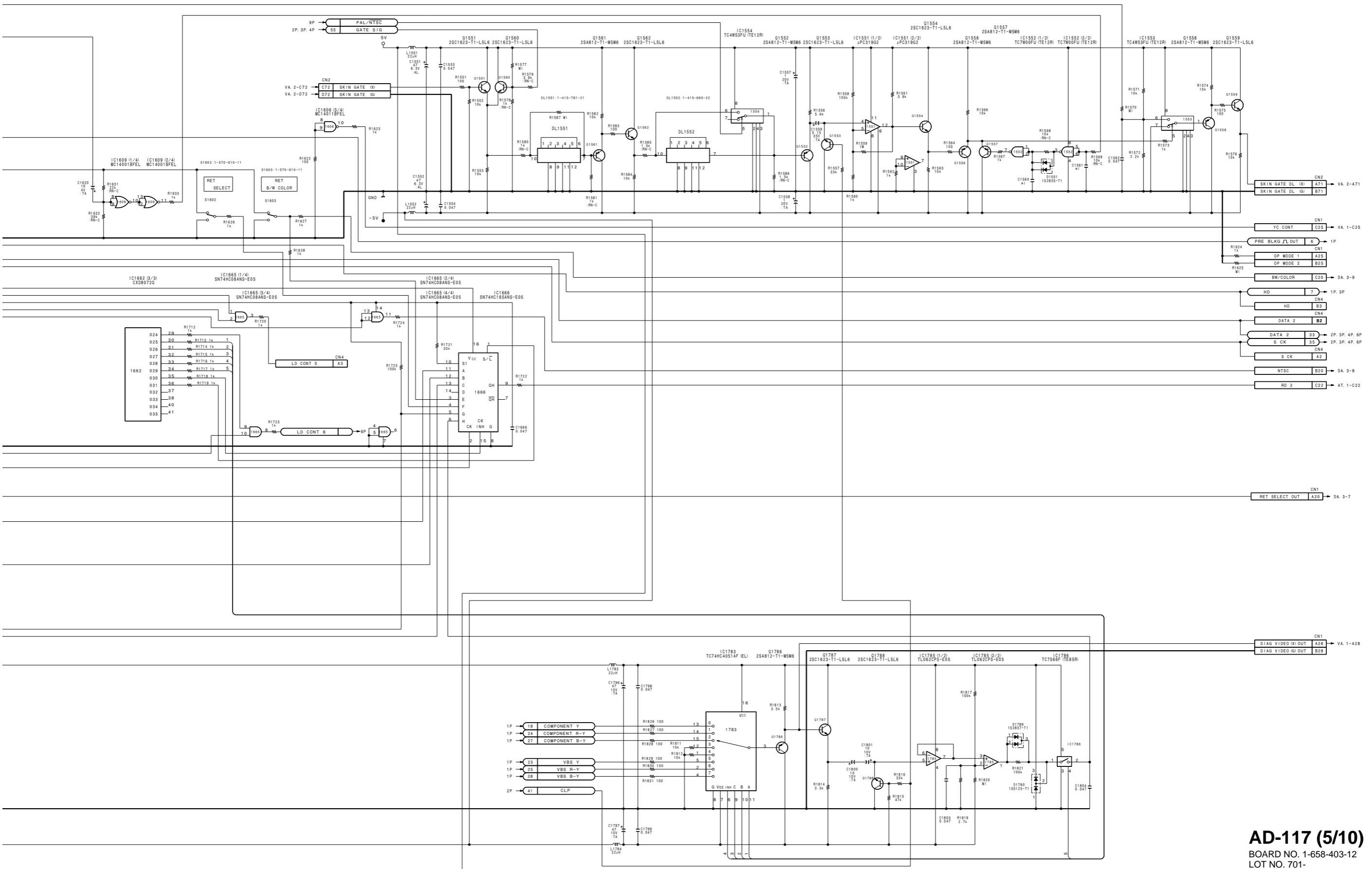
BOARD NO. 1-058
LOT NO. 701-

B-BKP7311-AD117-12

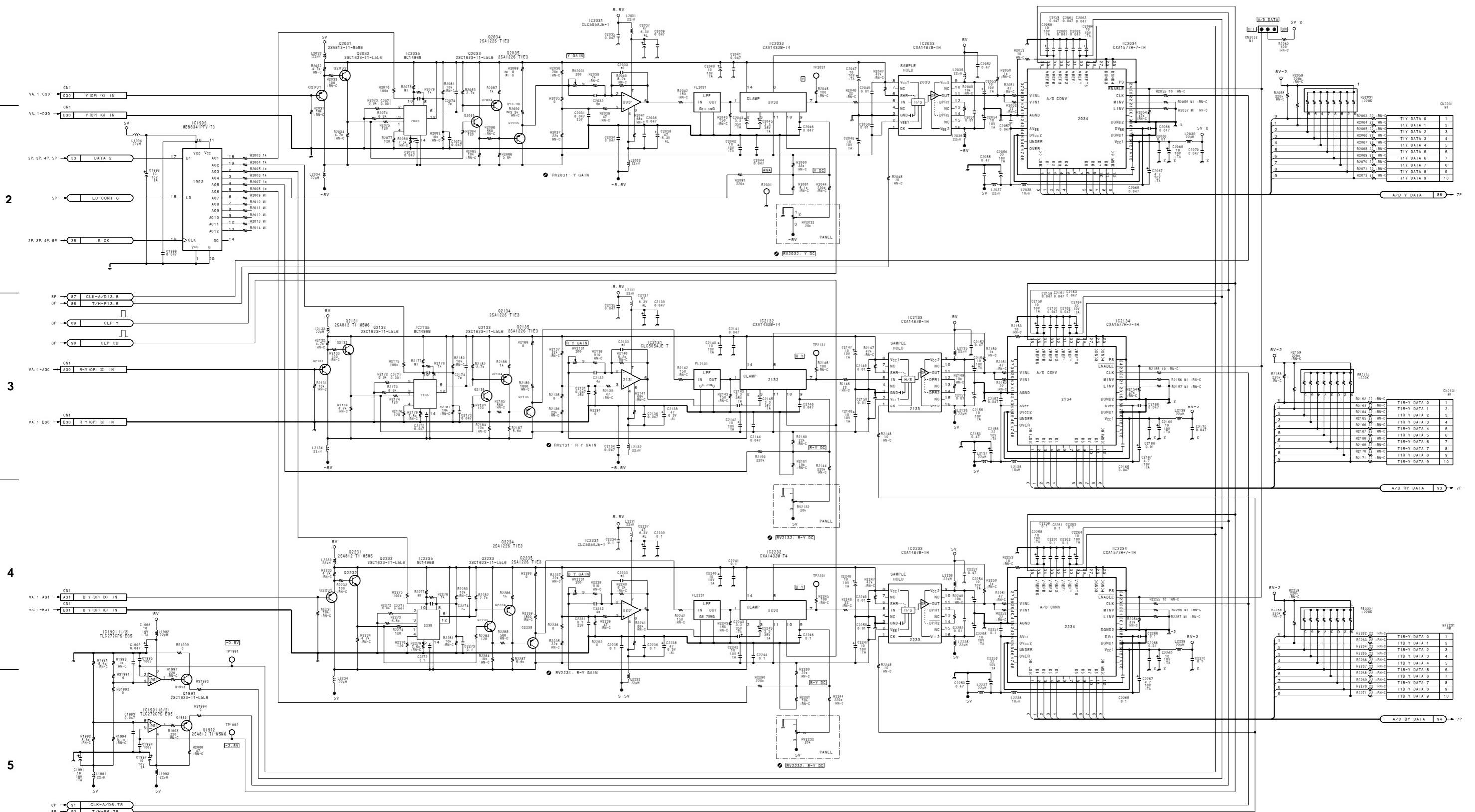


6-10 (b)

6-10 (b)



1



5

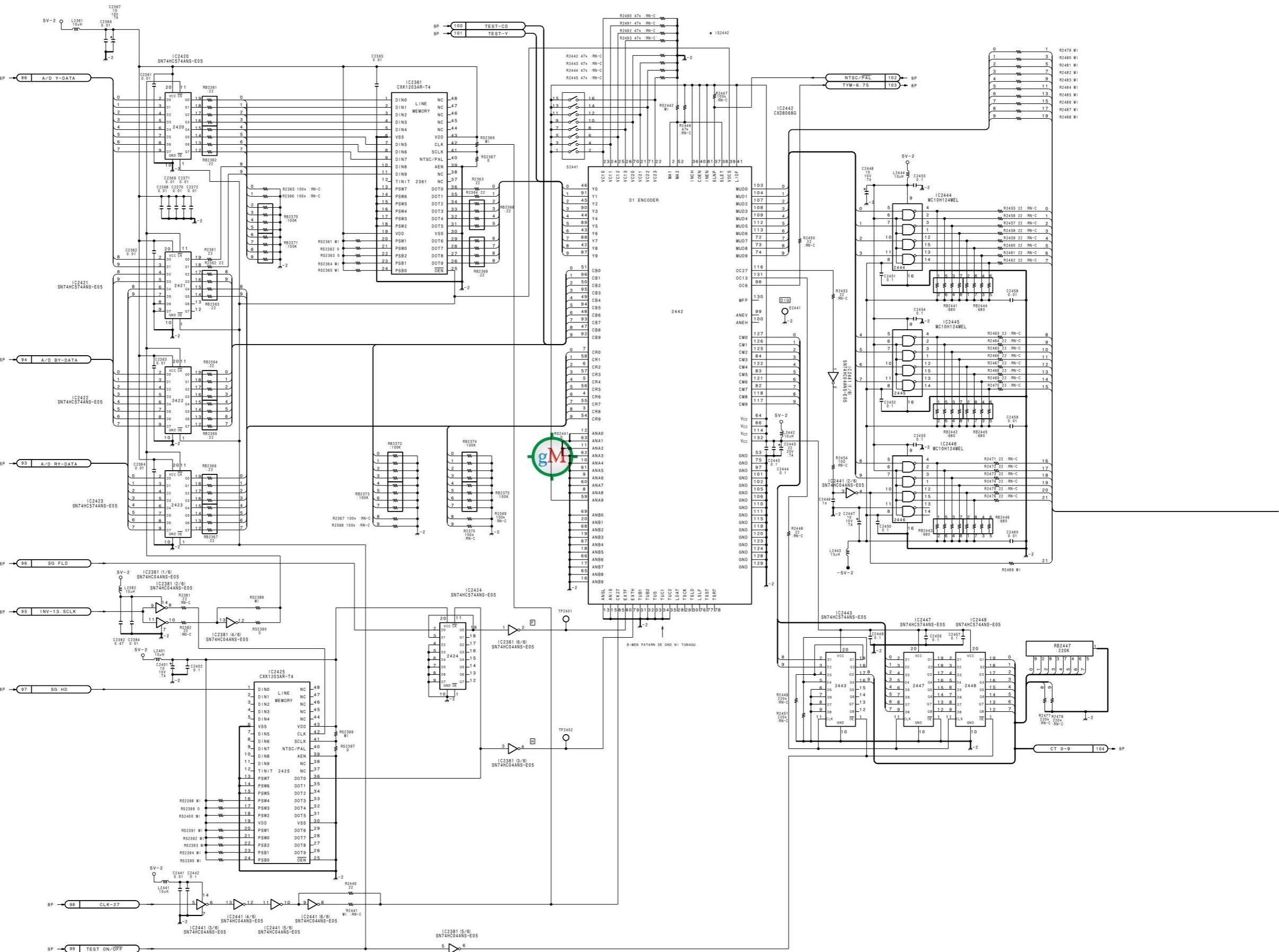
AD-117 (6/10)

BOARD NO. 1-658-403-12

BOARD NO. 1
LOT NO. 701-

B-BKP7311-AD117-12

BRI/STT/ABT/12



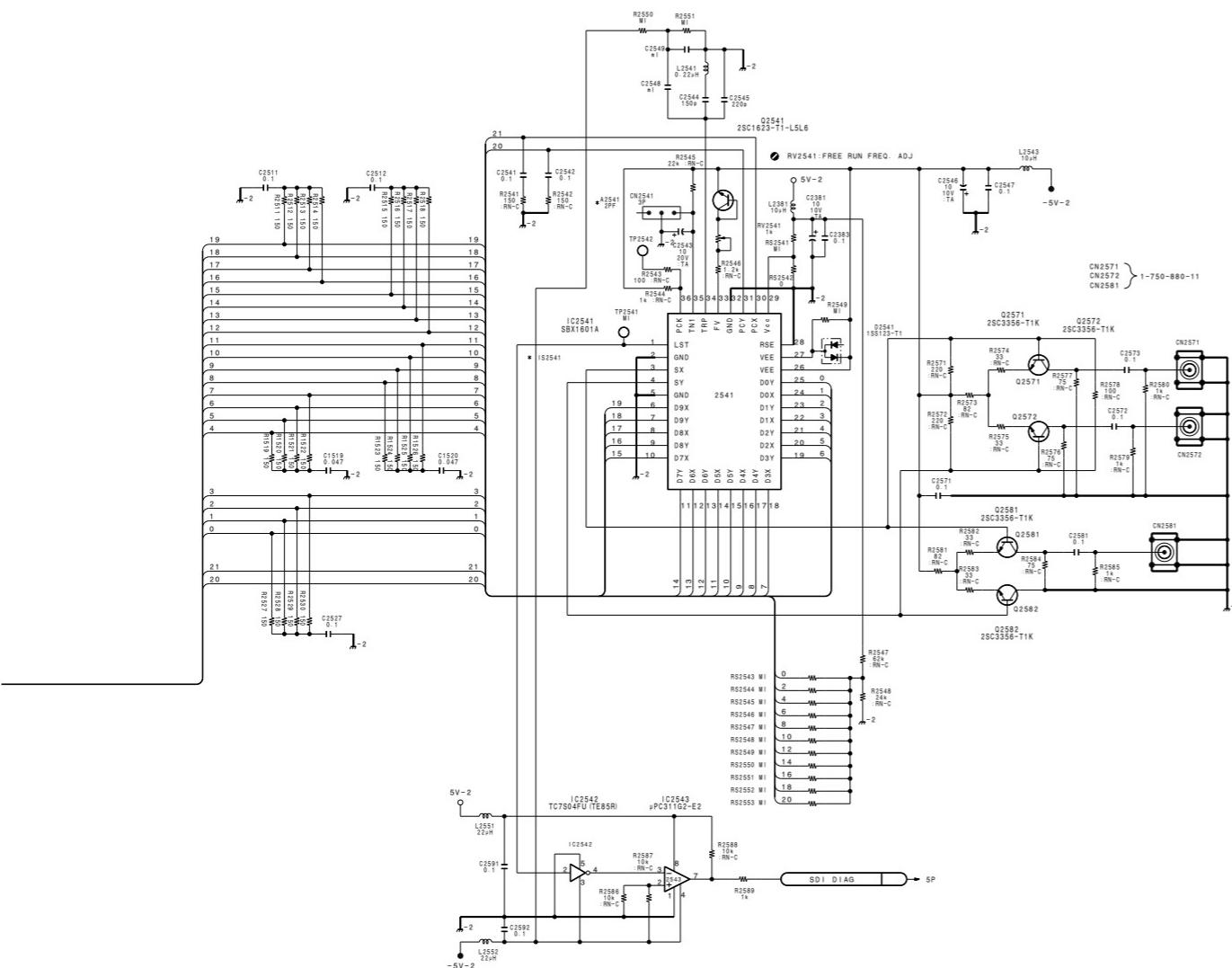
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2

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4

5



D-117 (7/10)

ARD NO. 1-658-403-12
T NO. 701-
K87311 AD147-12

15 (b)

6-15 (b)

BKP-7311

1

1

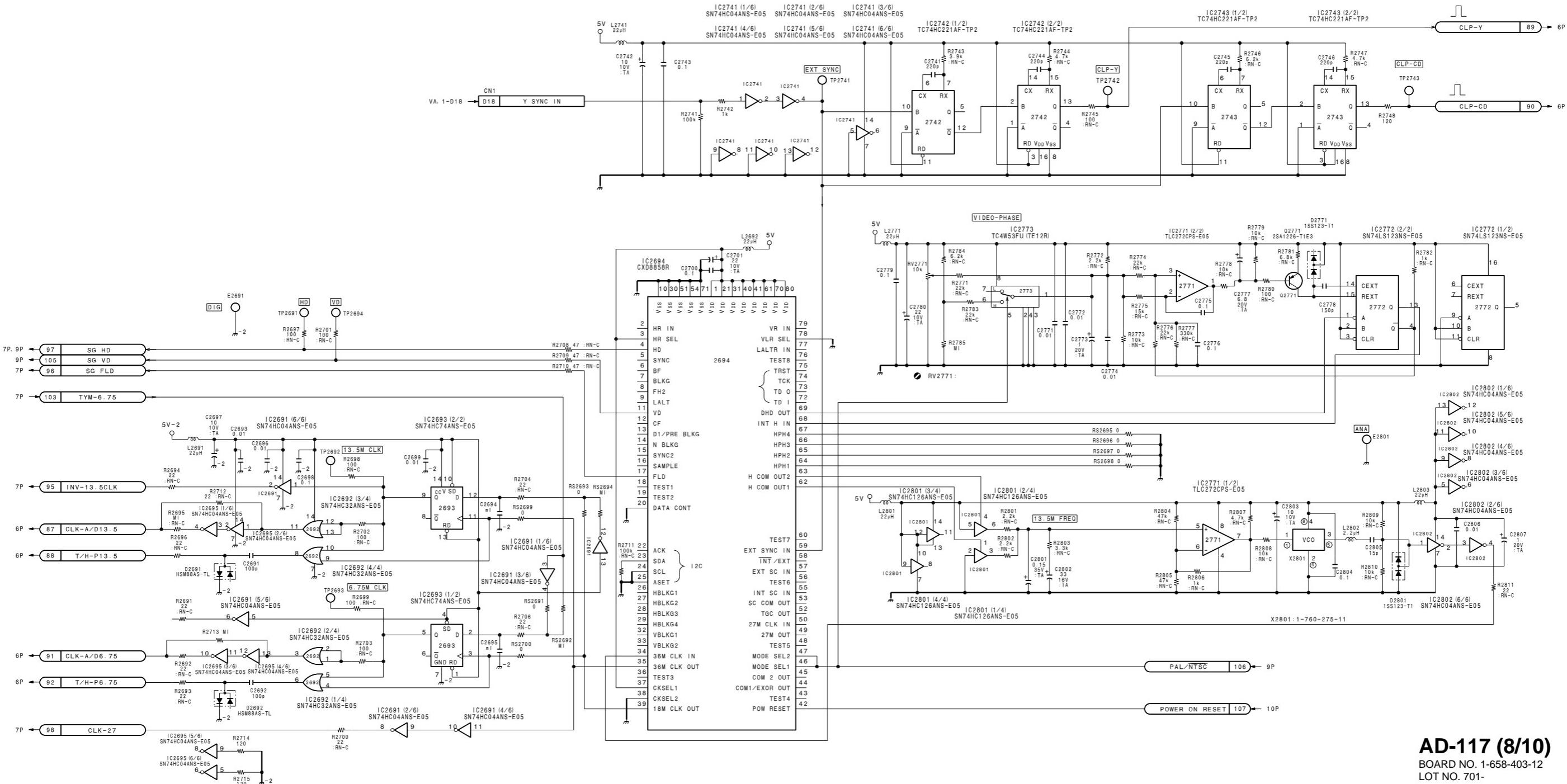
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1

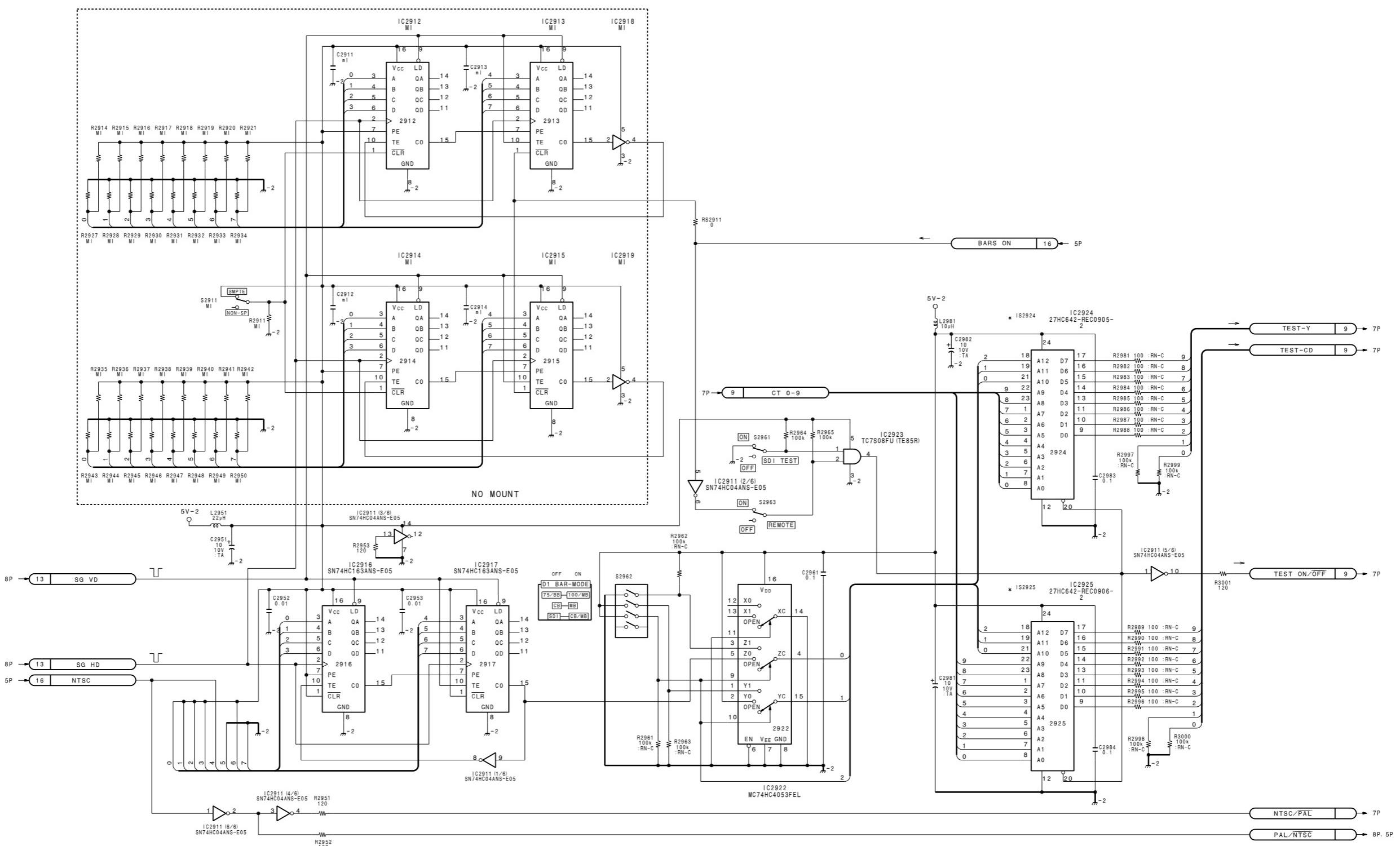
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1



AD-117 (8/10)
BOARD NO. 1-658-403-12
LOT NO. 701-
B-BKP7311-AD117-12



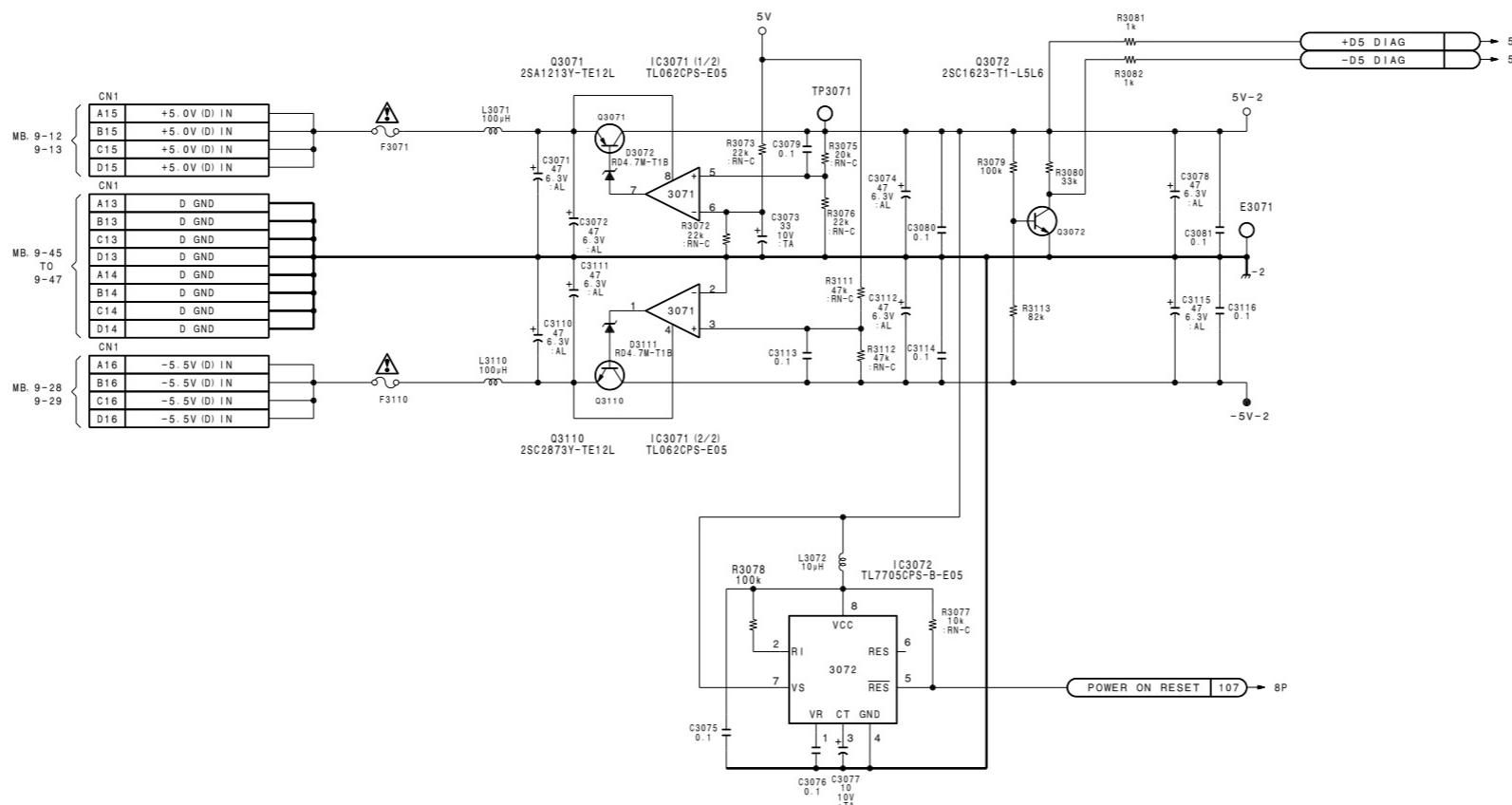
1

2

3

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5



AD-117 (10/10)

BOARD NO. 1-658-403-12
LOT NO. 701-
B-BKP7311-AD117-12

A

B

C

D

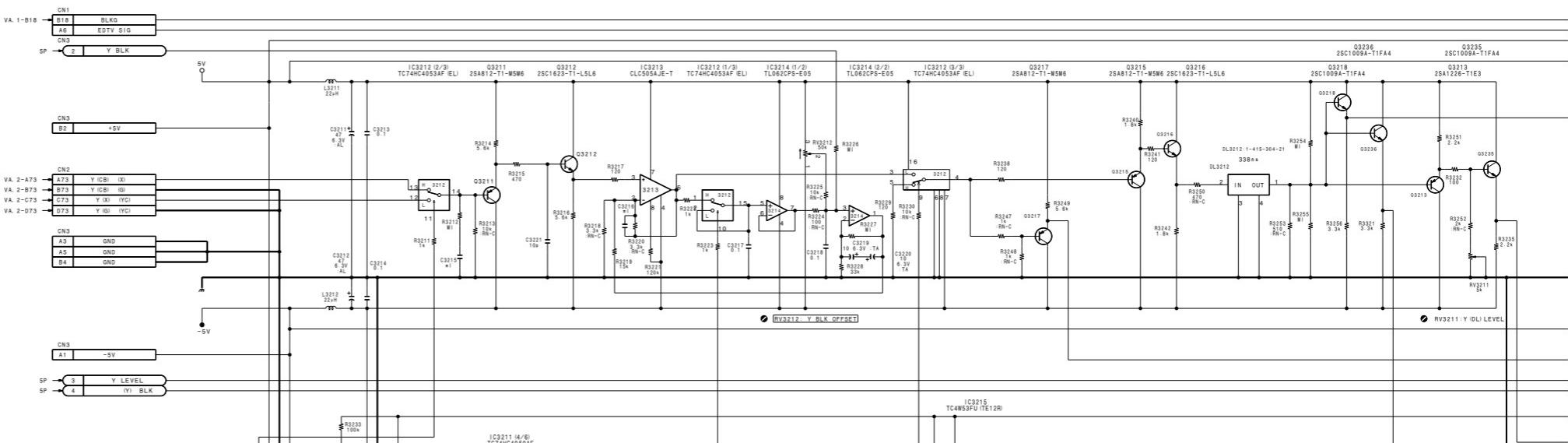
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F

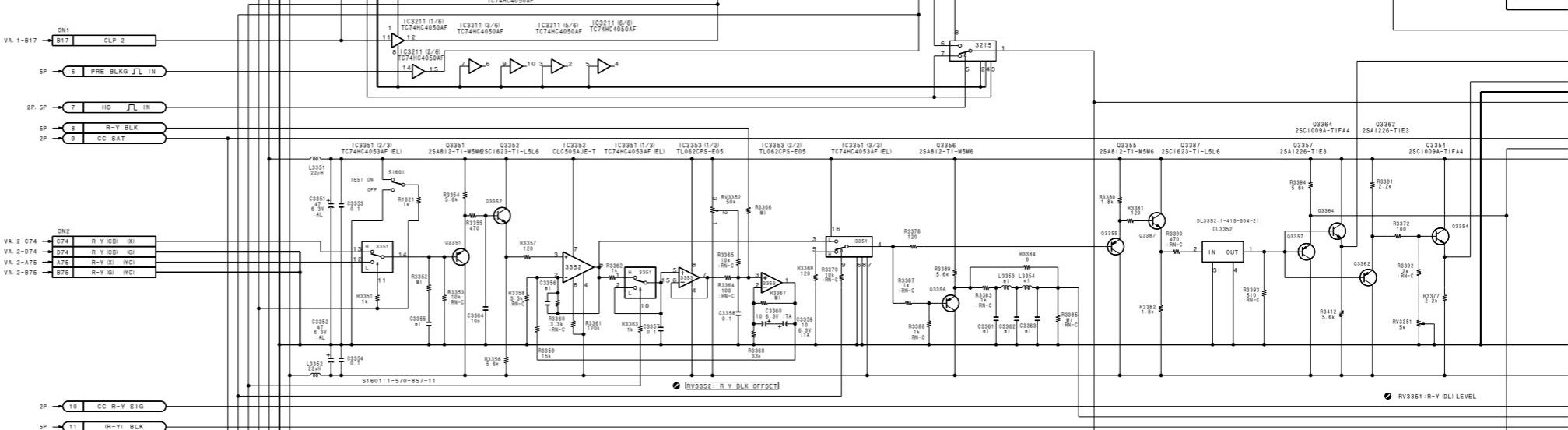
G

H

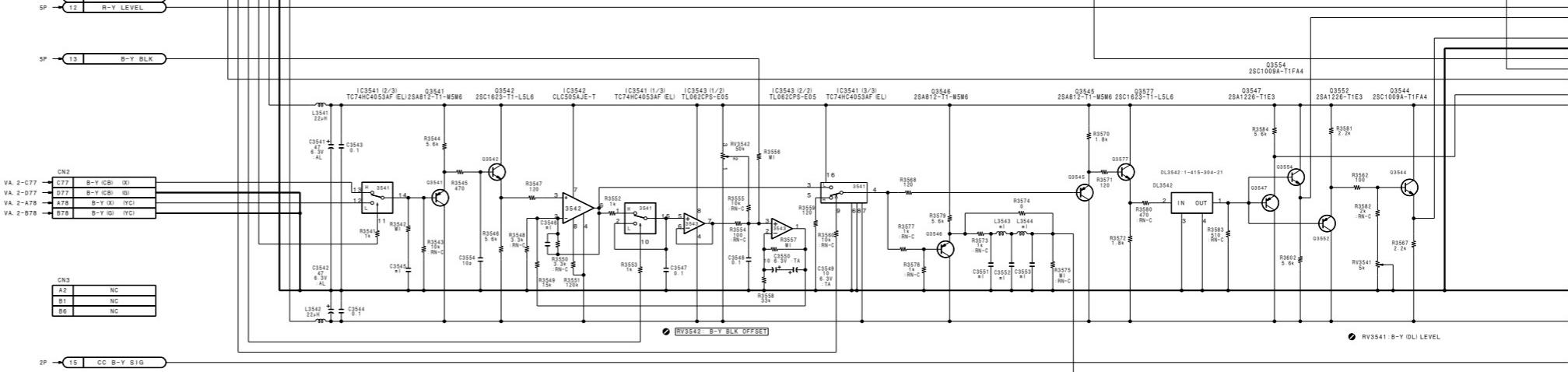
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2



3



4

A

B

C

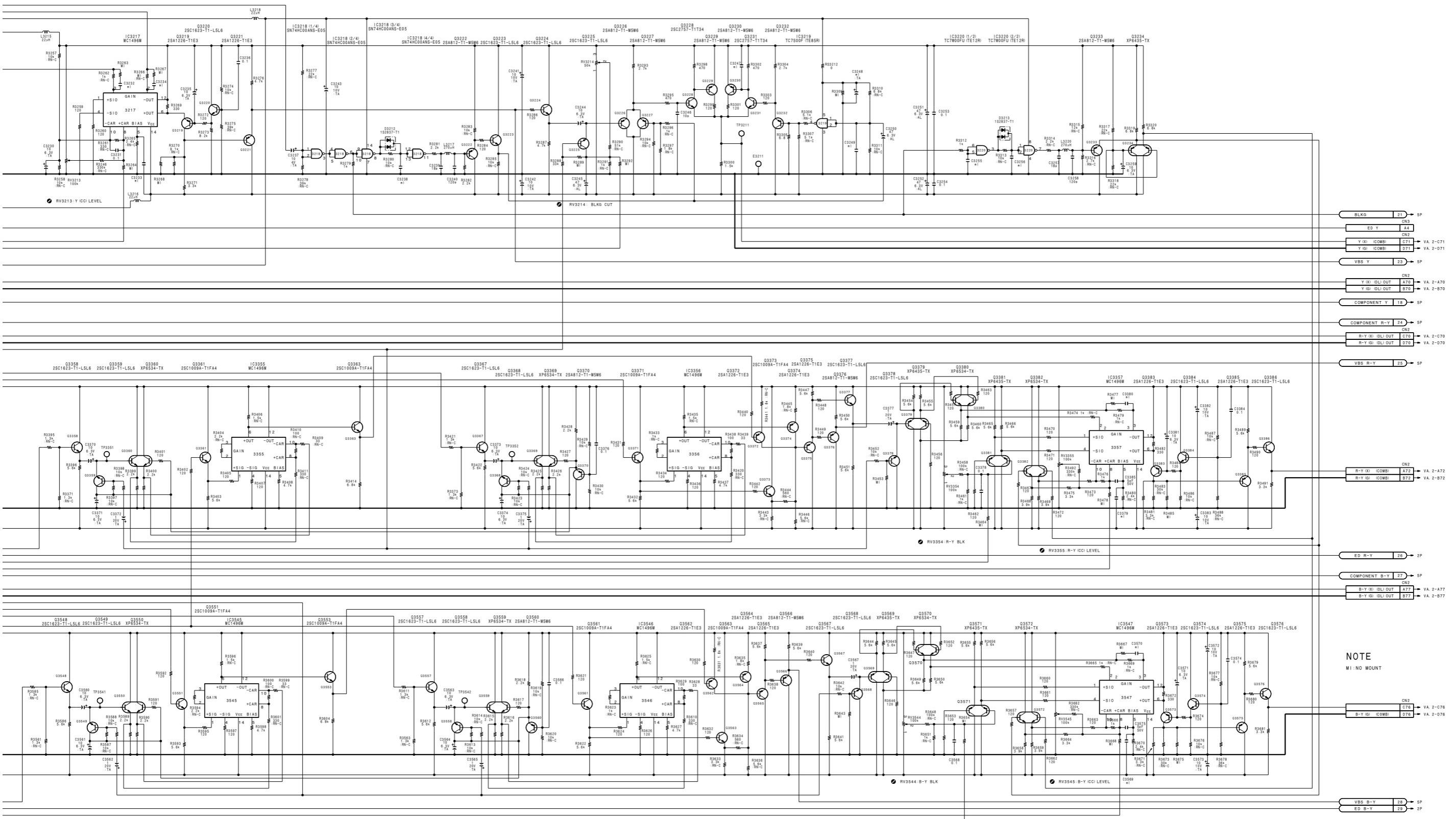
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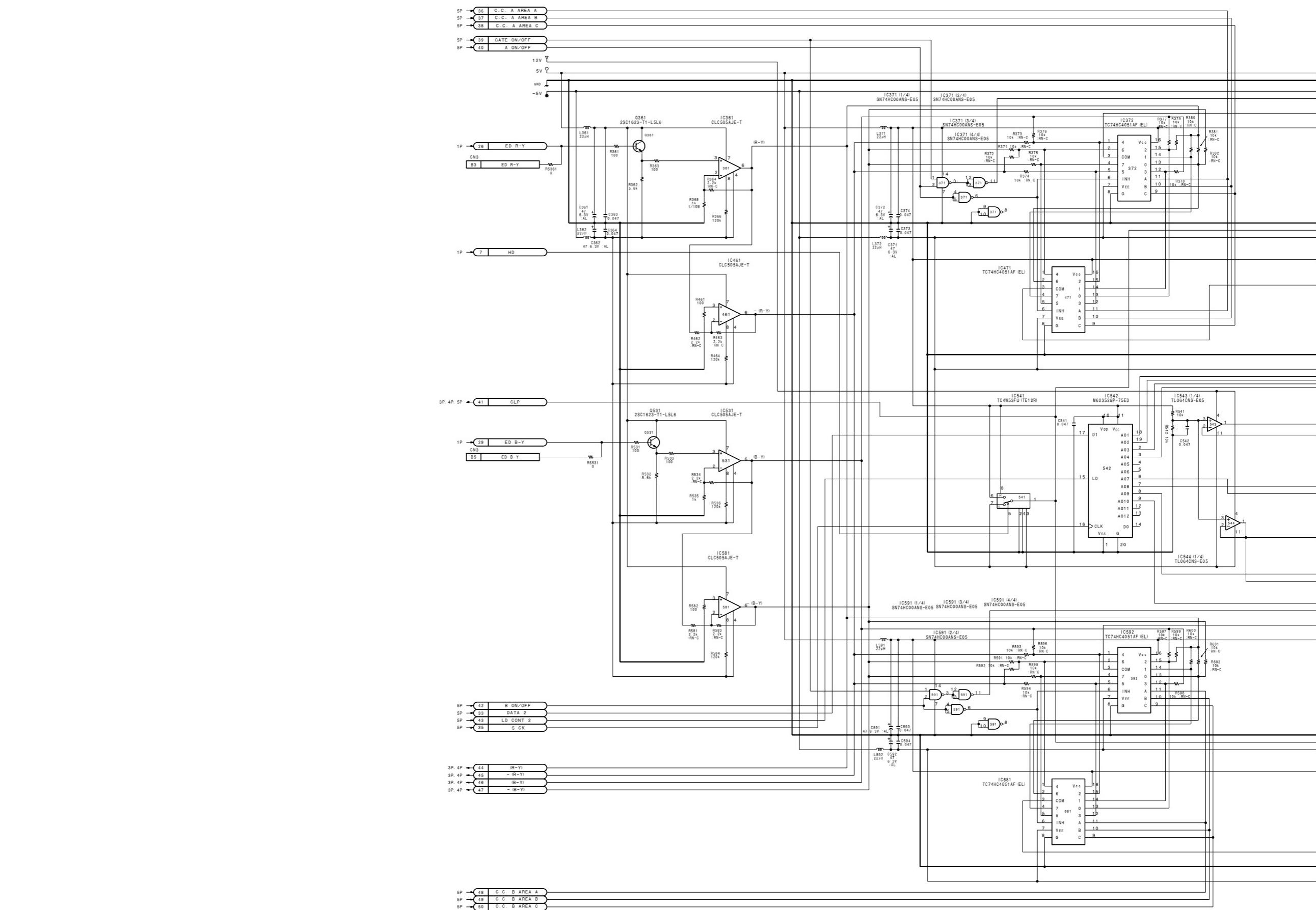
E

F

G

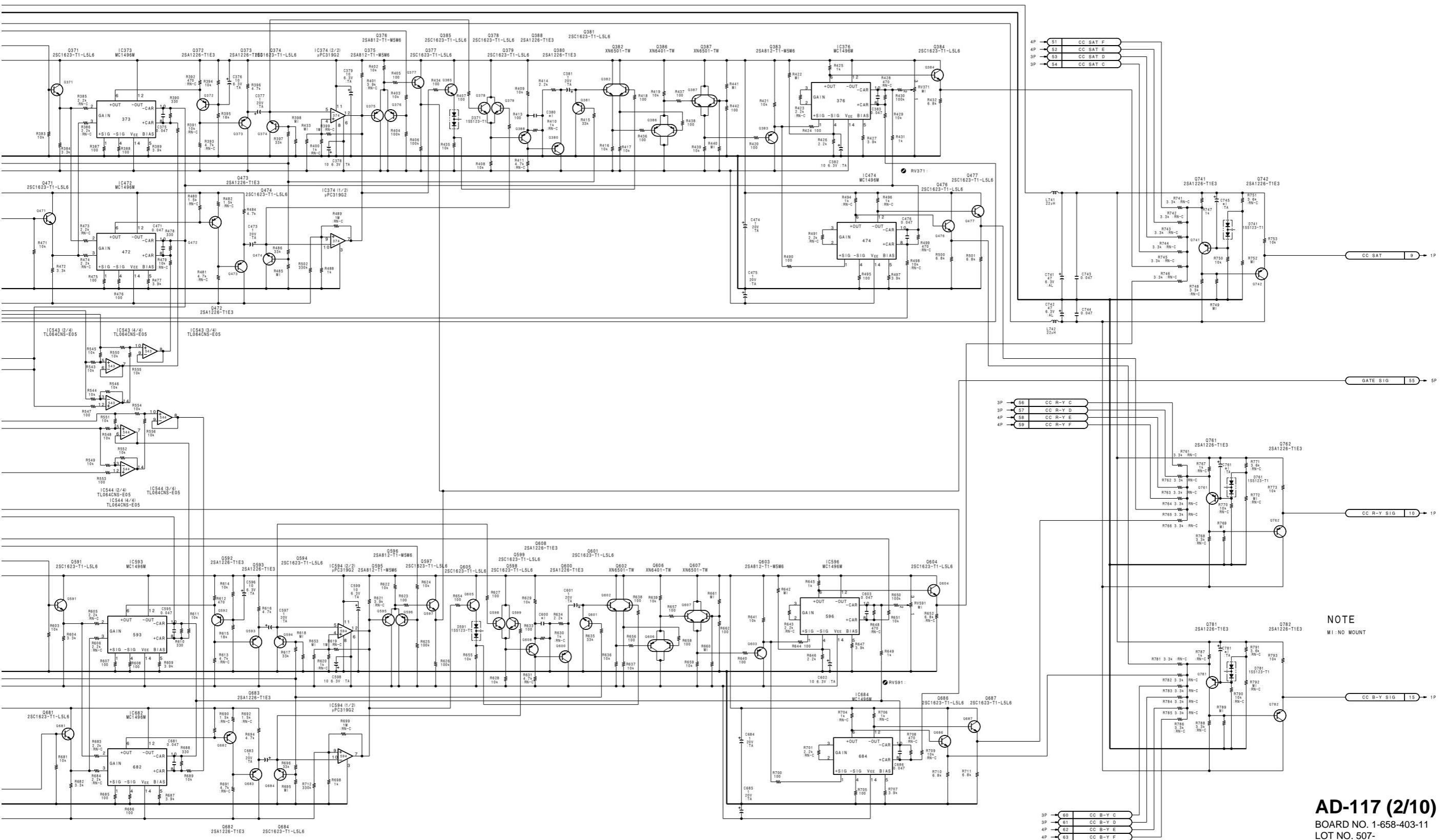
H





6-4 (a)

6-4 (a)



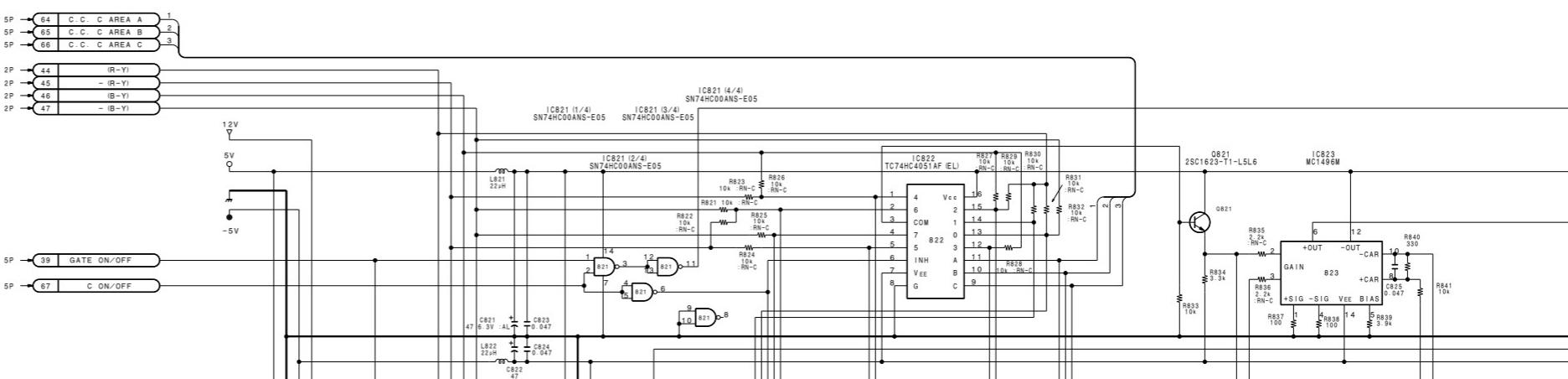
AD-117 (2/10)

BOARD NO. 1-658-403-11

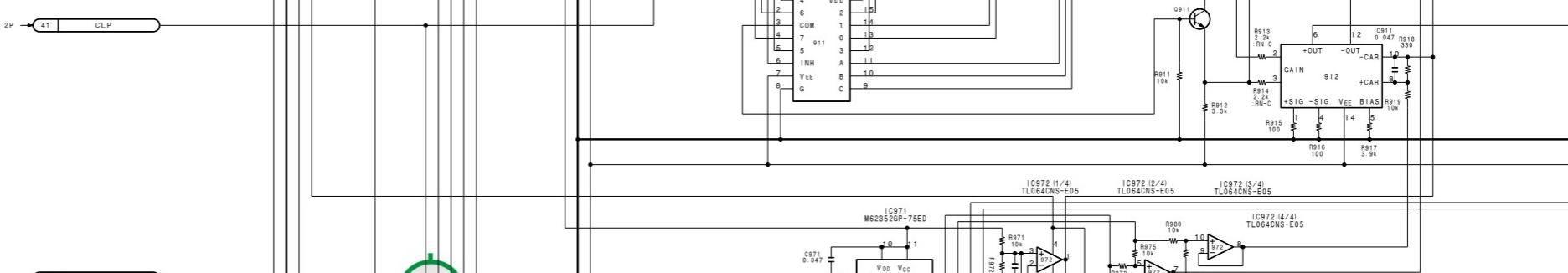
LOT NO. 507-

B-¥BKP7311-AD117-11

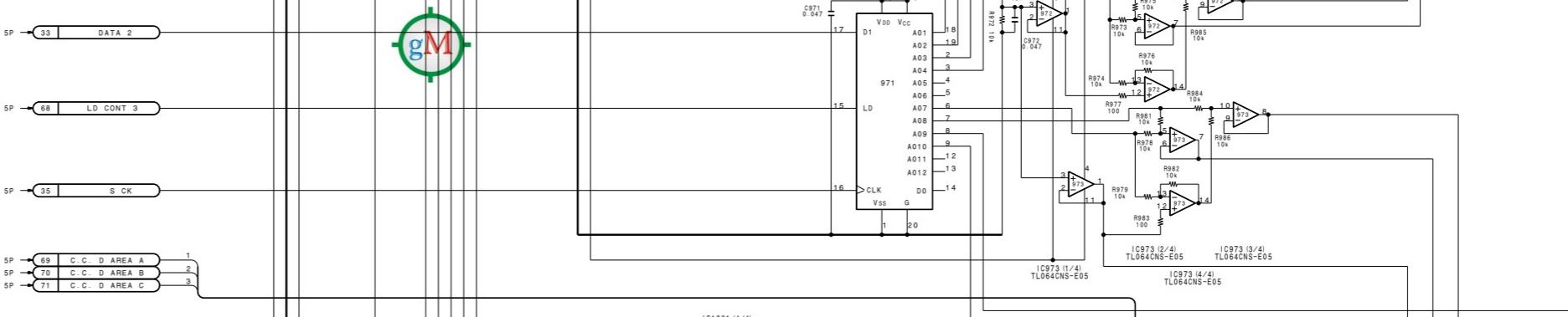
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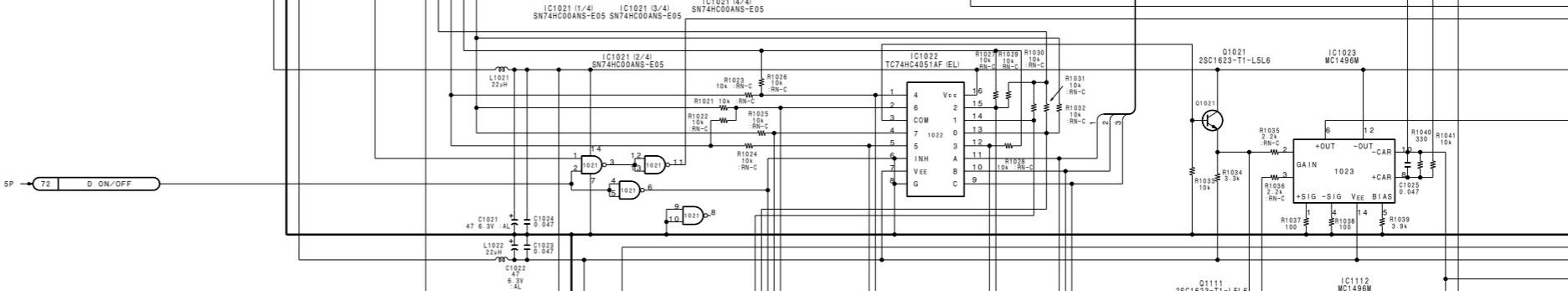
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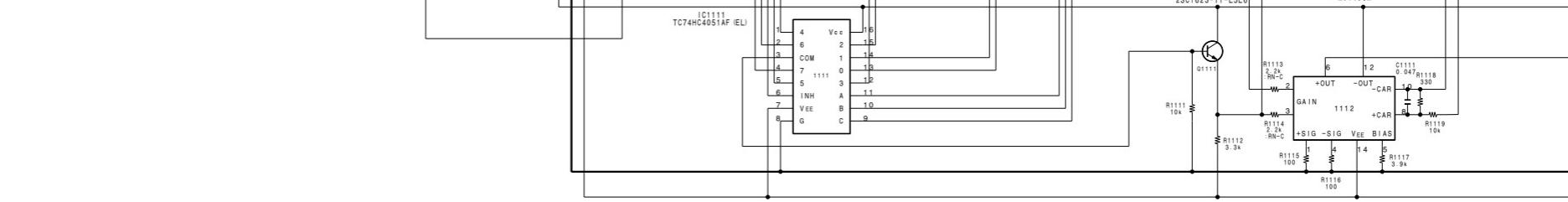
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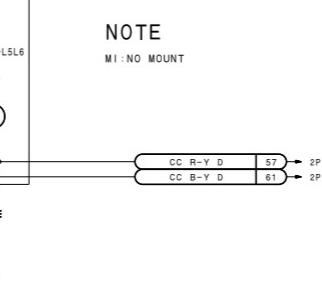
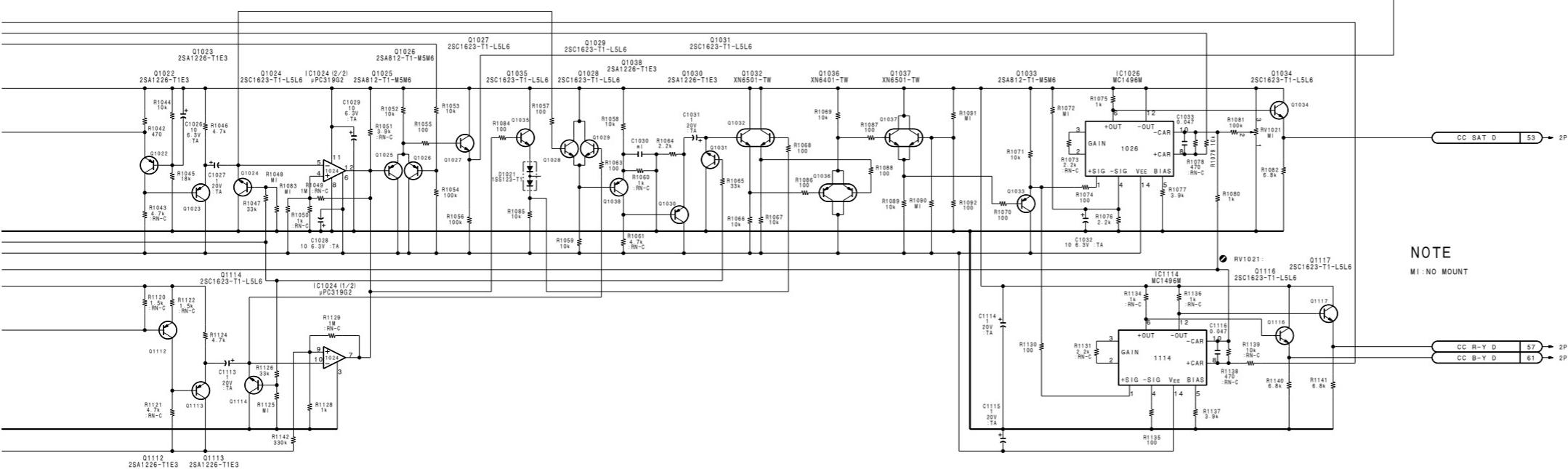
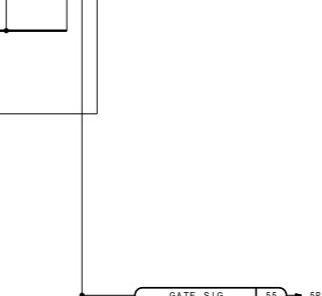
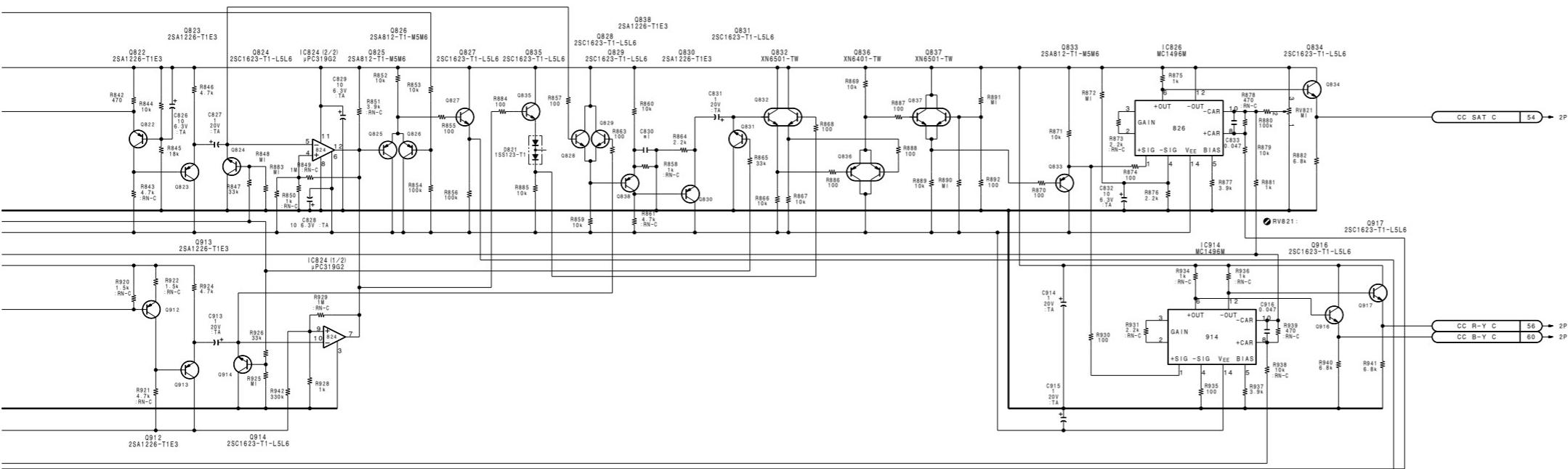


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5





AD-117 (3/10)

BOARD NO. 1-658-403-11

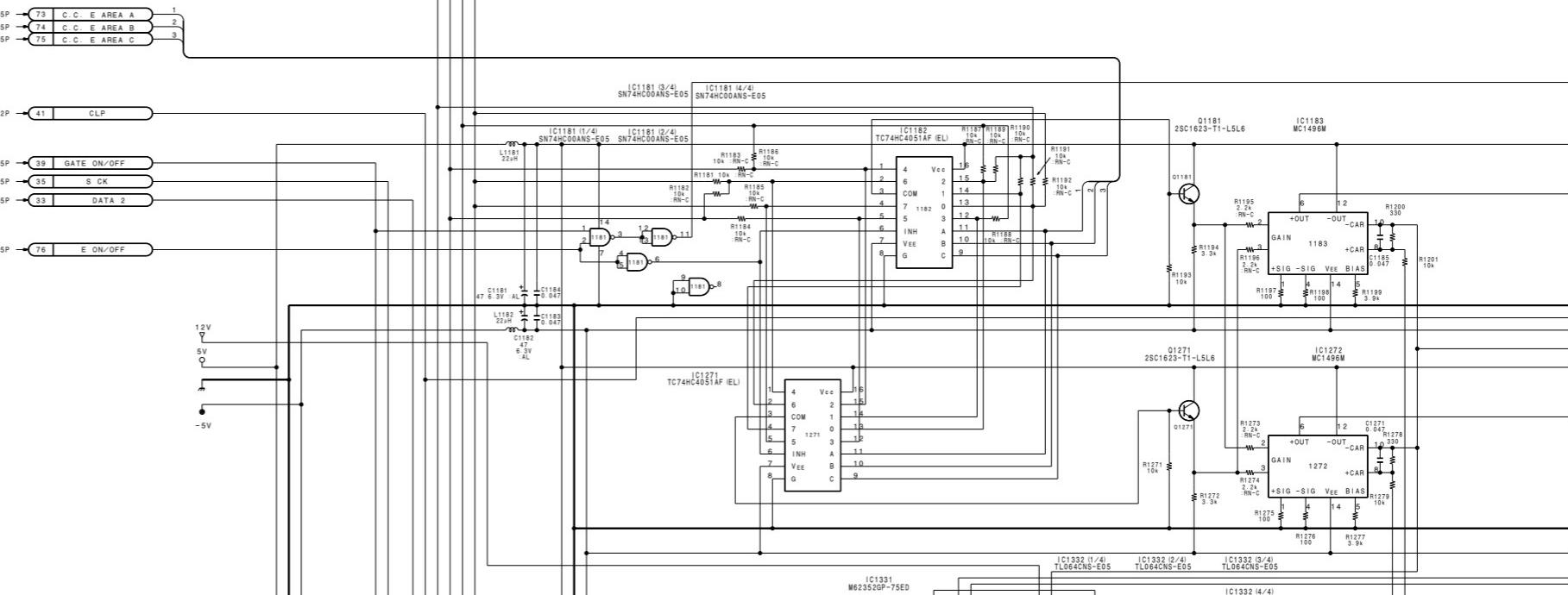
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B-VBKP7311-AD117-11

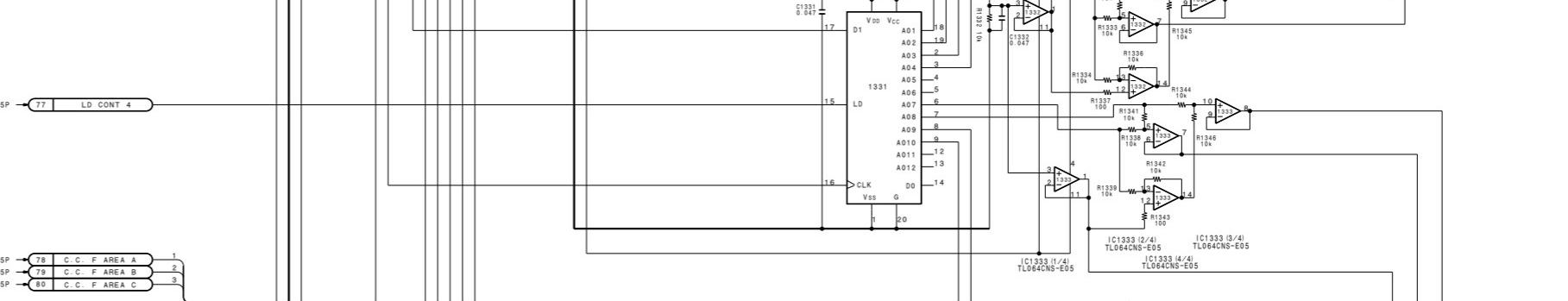
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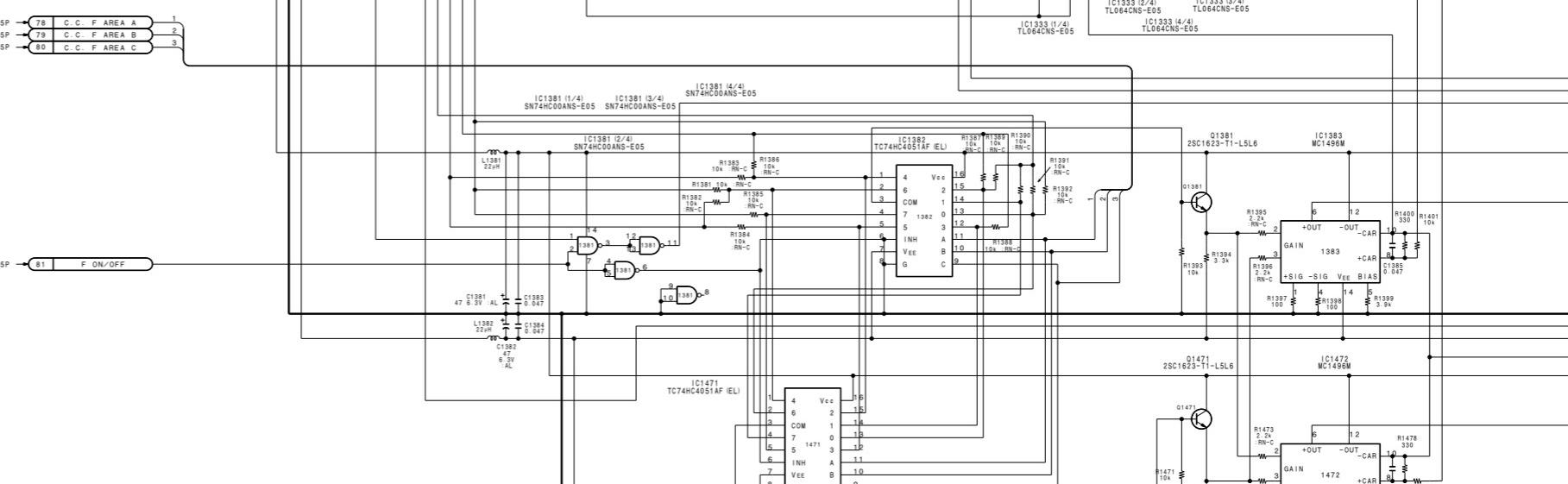
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3



4



5

A

B

C

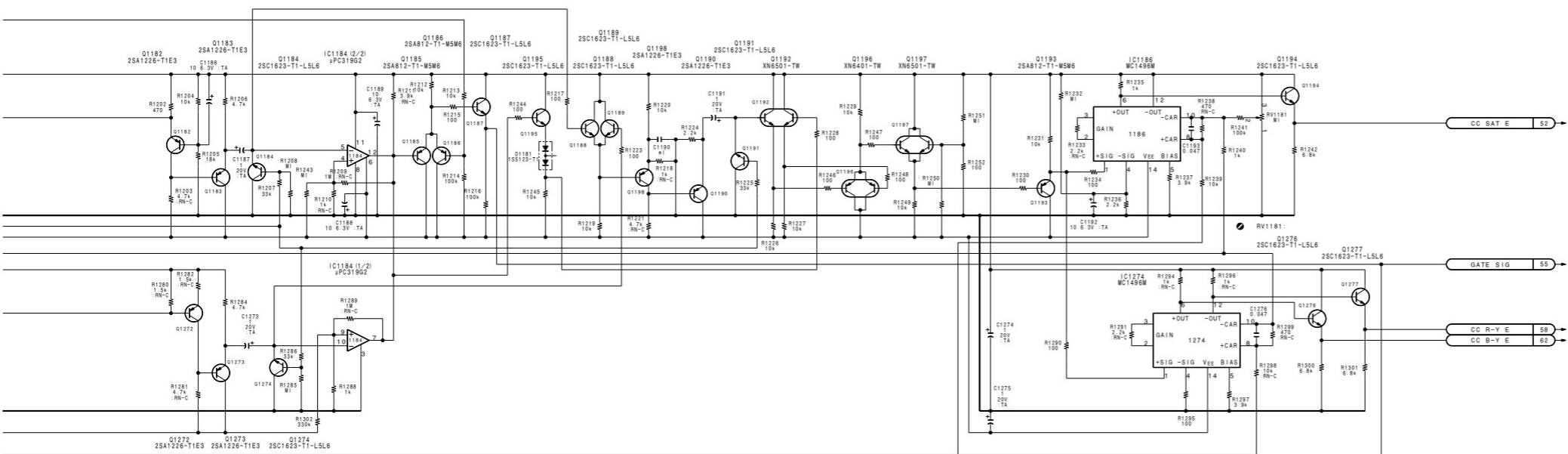
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E

F

G

H



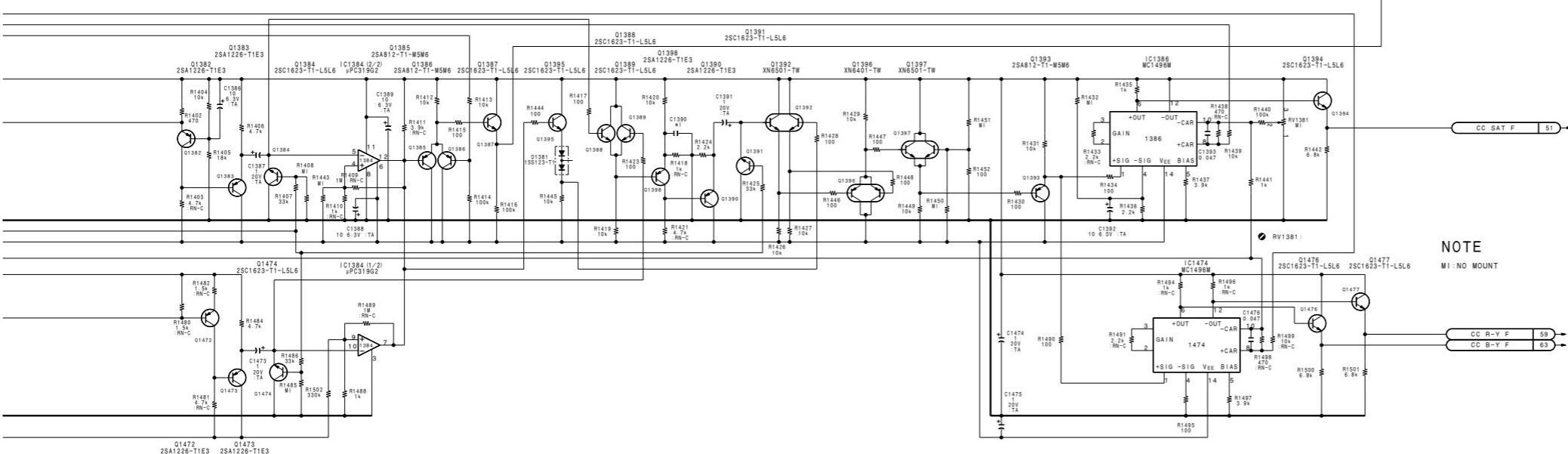
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2

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4

5

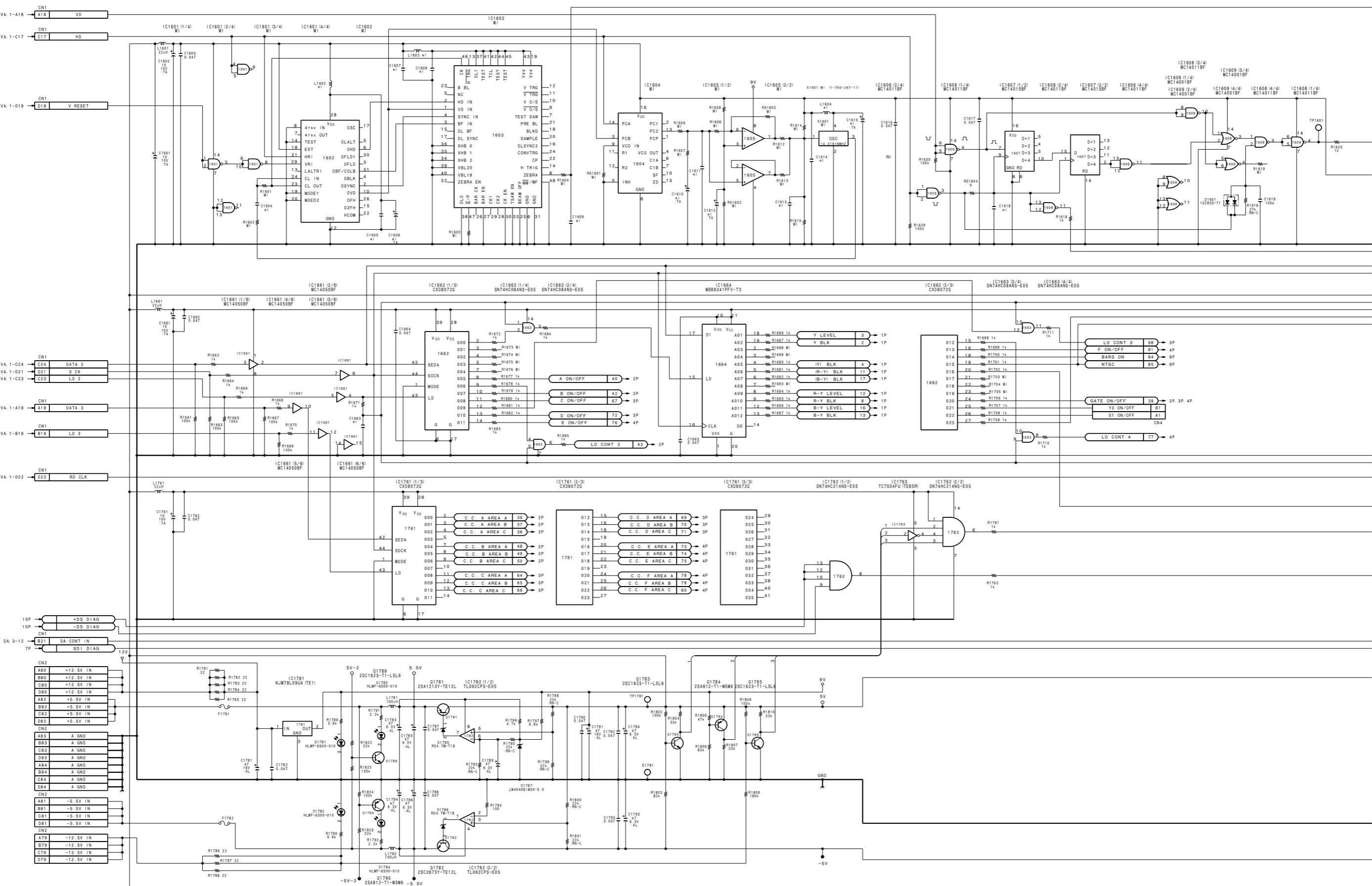


AD-117 (4/10)

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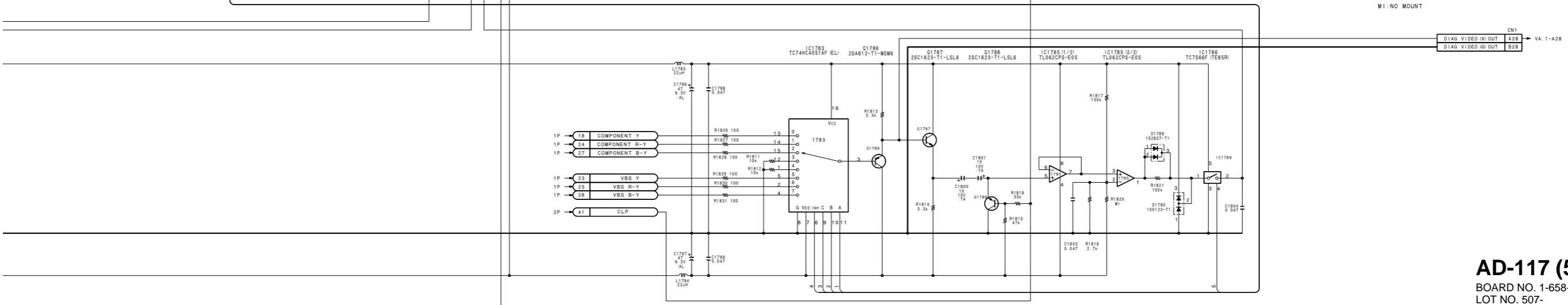
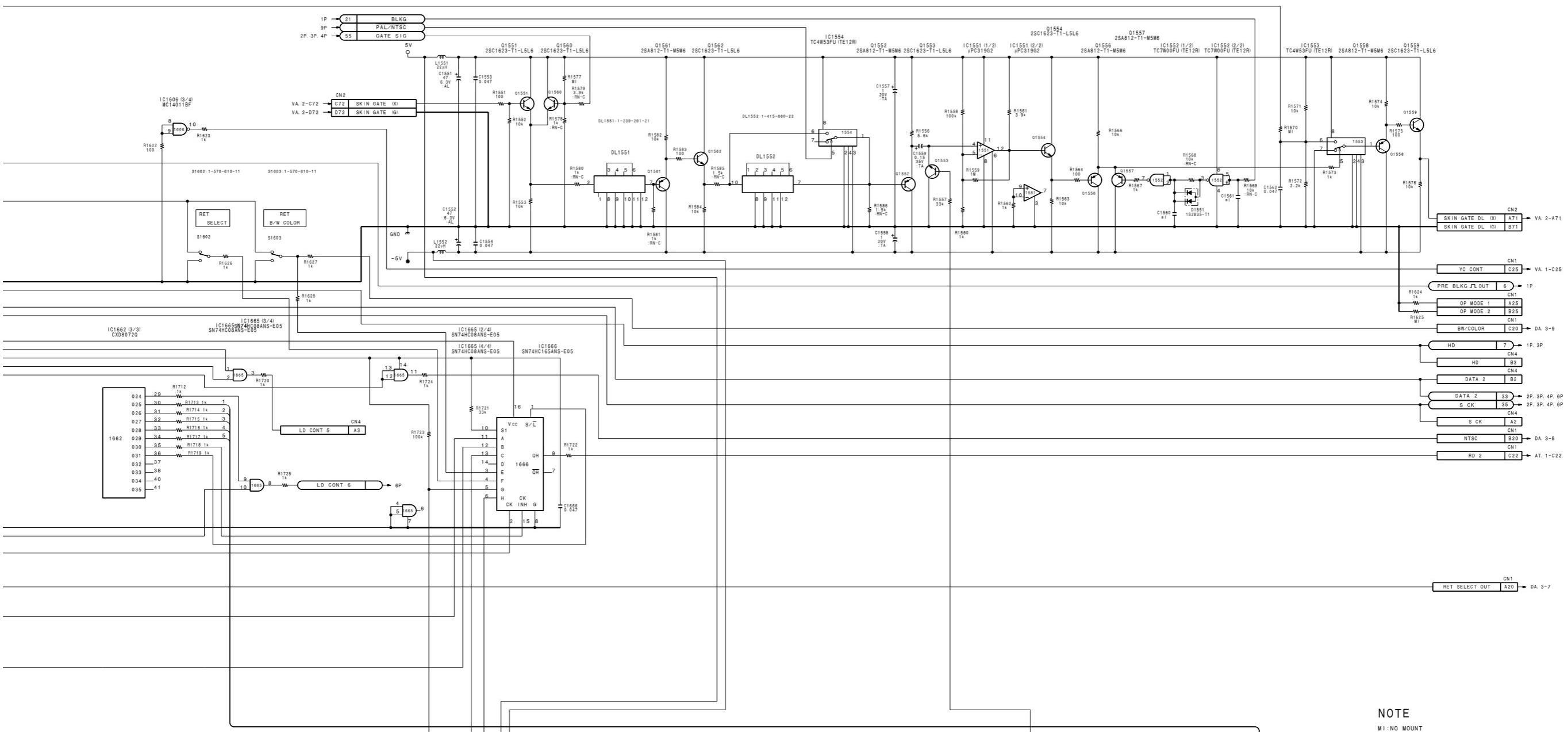
LOT NO. 507-

B-¥BKP7311-AD117-11



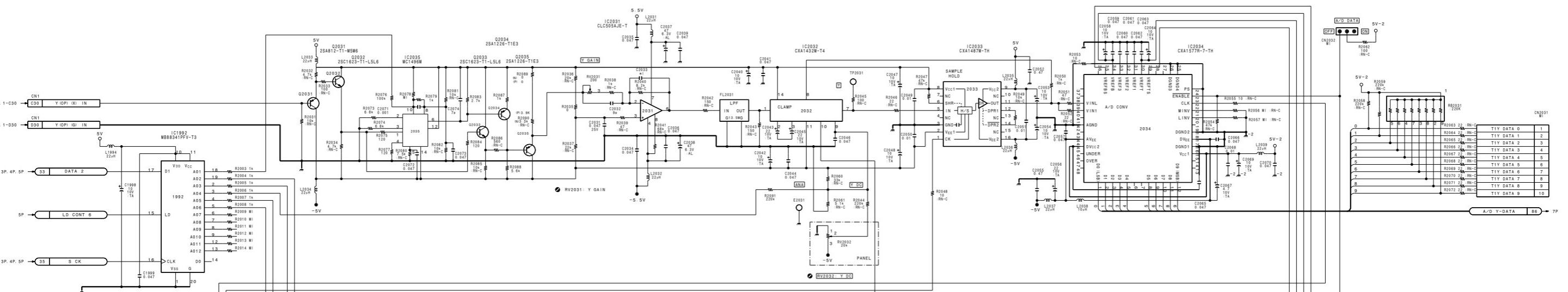
6-10 (a)

6-10 (a)

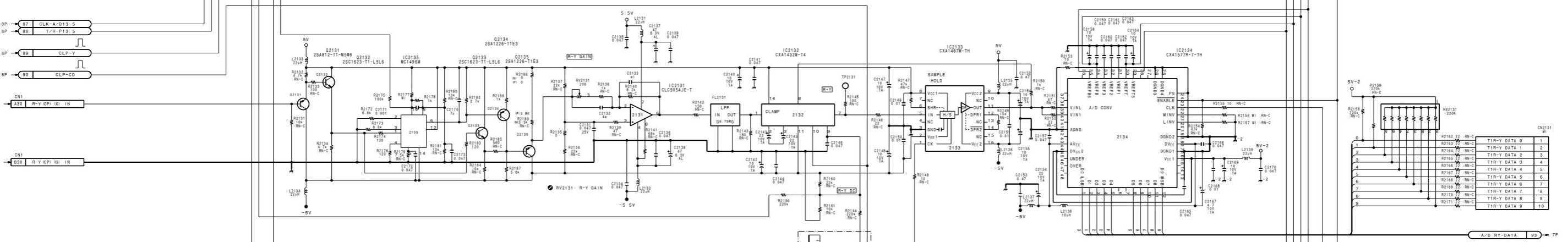


NOTE
MI: NO MOUNT

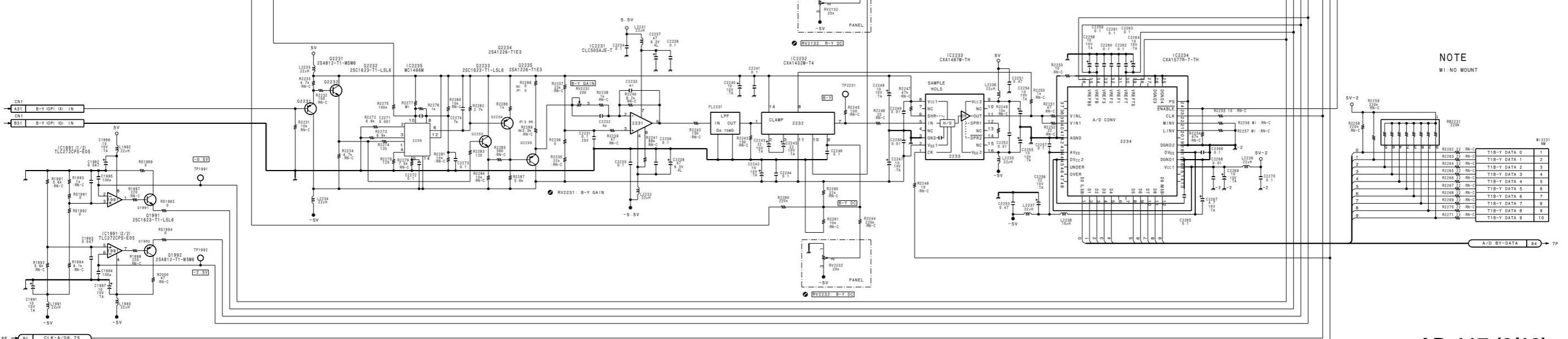
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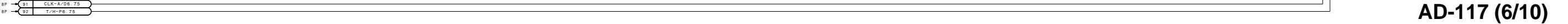
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3



4



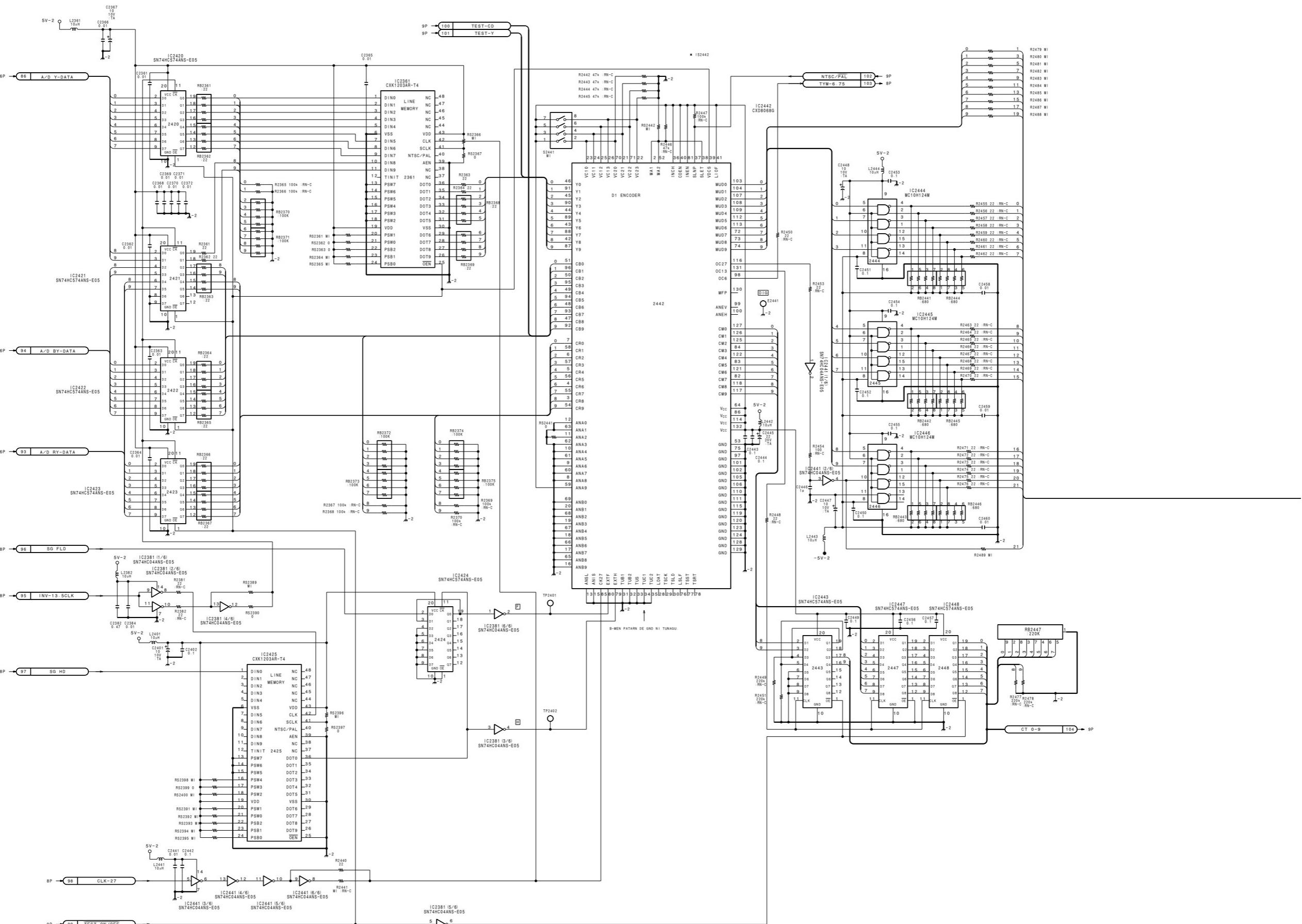
NOTE
MI: NO MOUNT

AD-117 (6/10)

BOARD NO. 1-658-403-11
LOT NO. 507-
B-WBKP7311-AD117-11

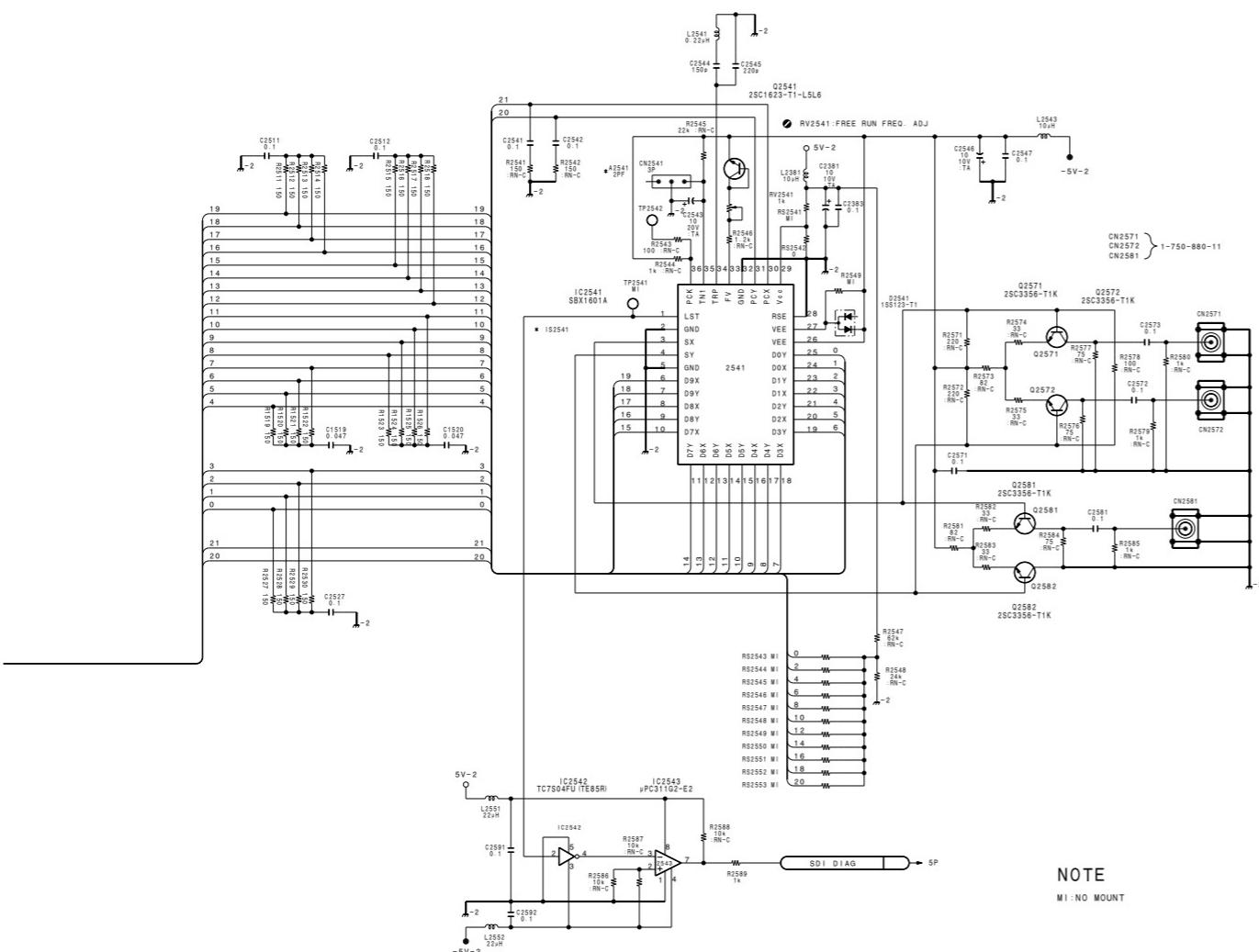
BKP-7311

A**B****C****D****E****F****G****H**



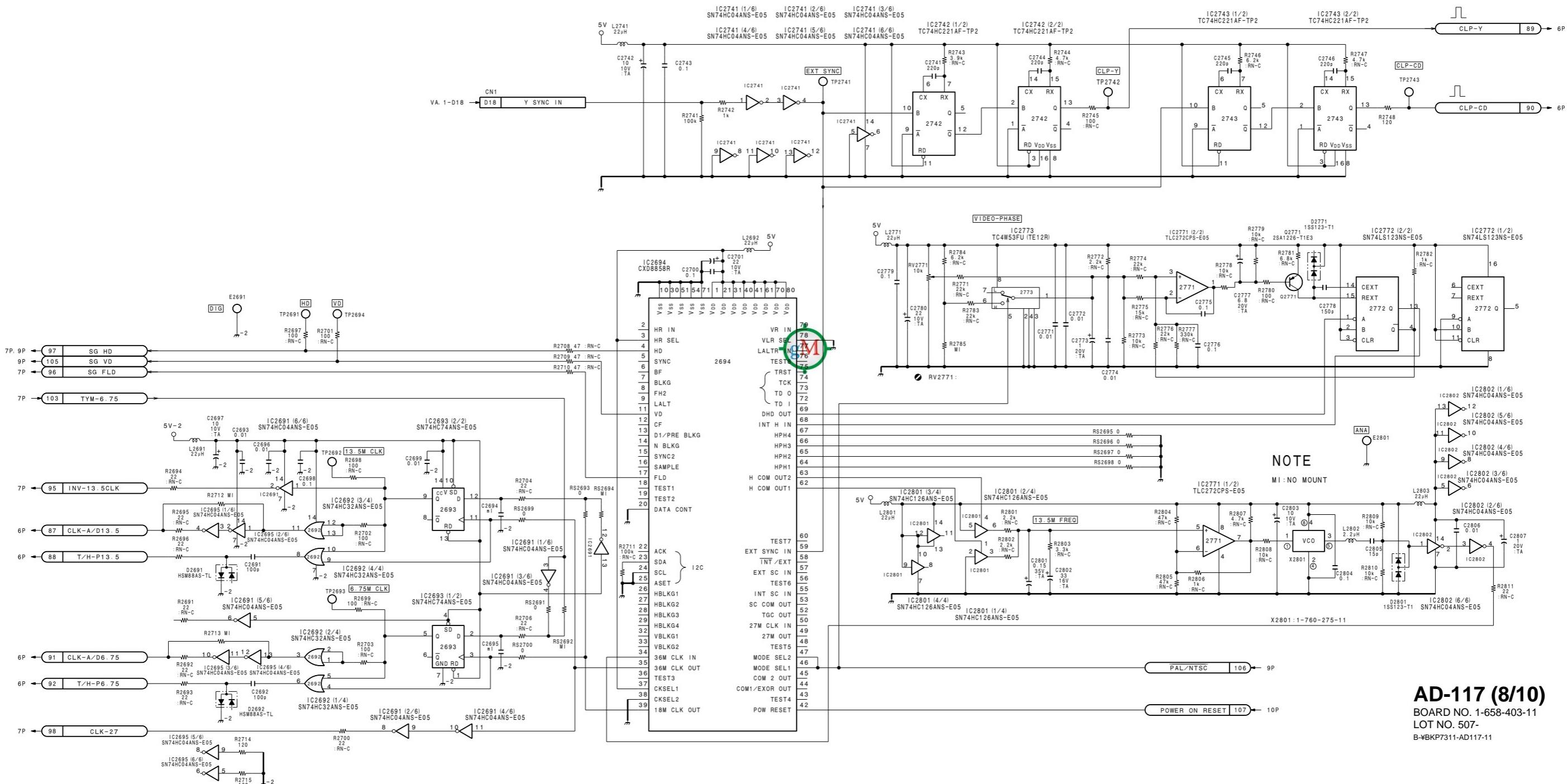
6-14 (a)

6-14 (a)

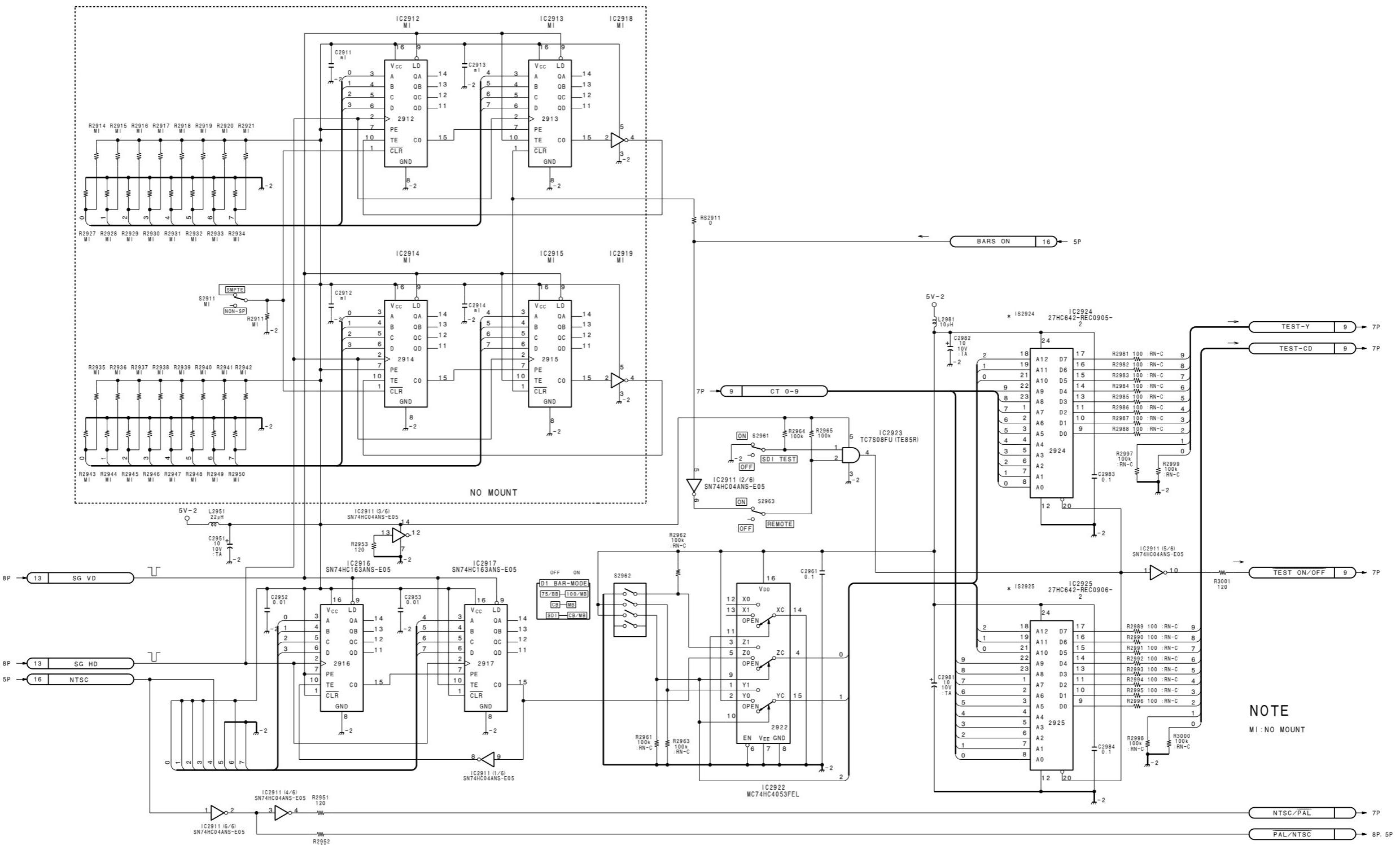


AD-117 (7/10)

BOARD NO. 1-658-403-11
LOT NO. 507-
B-KBP7311-AD117-11



AD-117 (8/10)
BOARD NO. 1-658-403-11
LOT NO. 507-
B-YBK7311-AD117-11



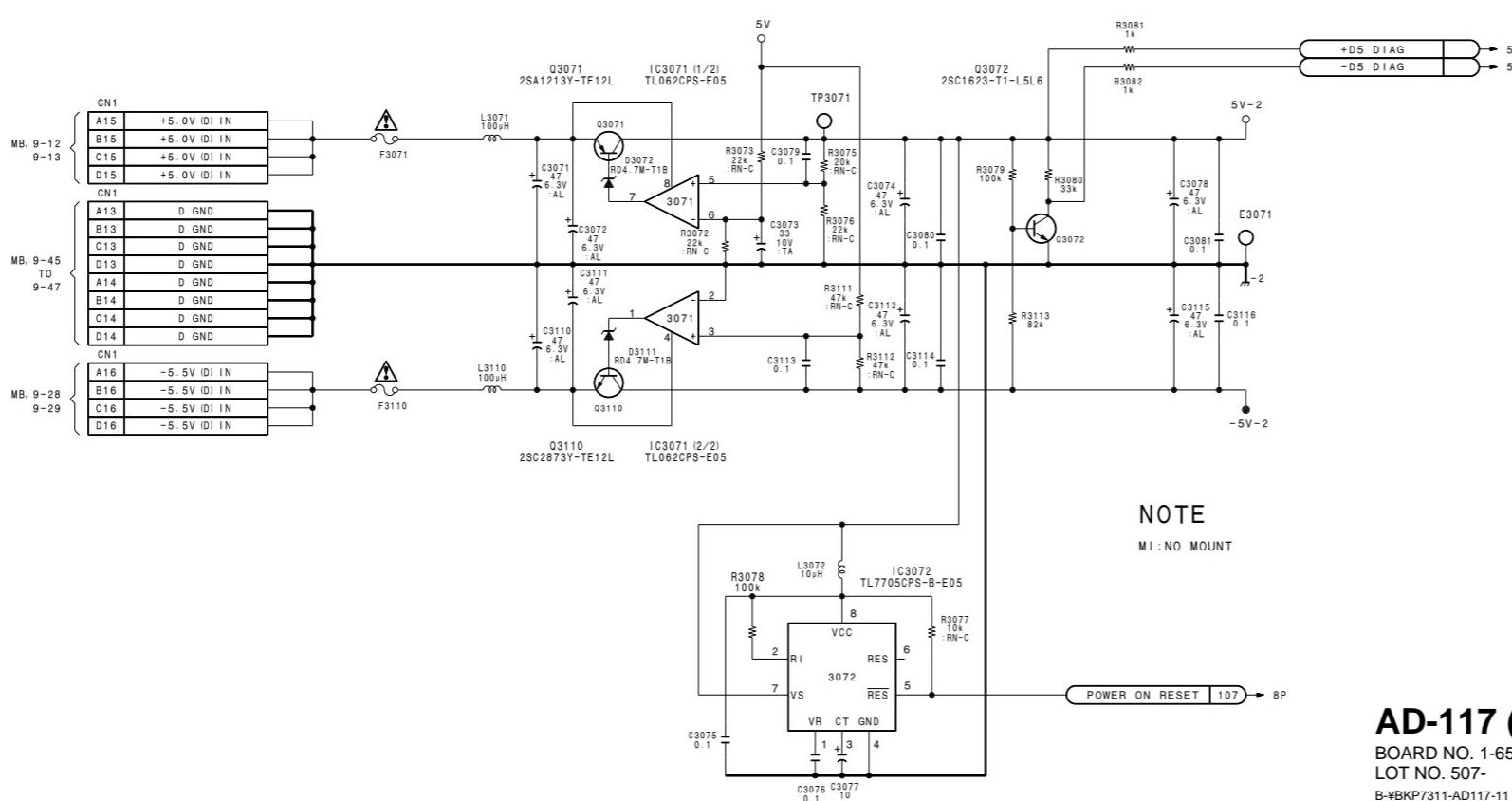
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AD-117 (10/10)

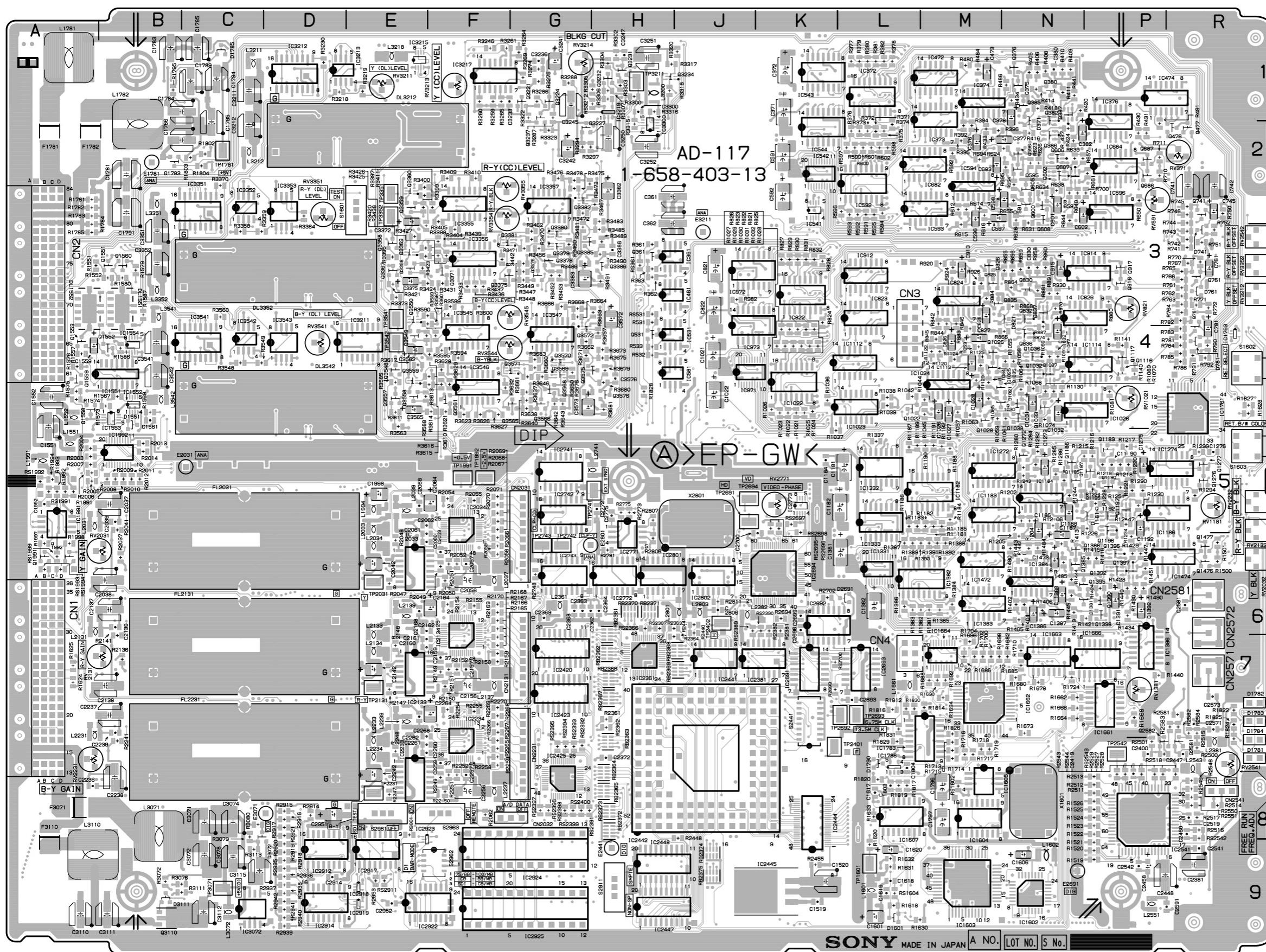
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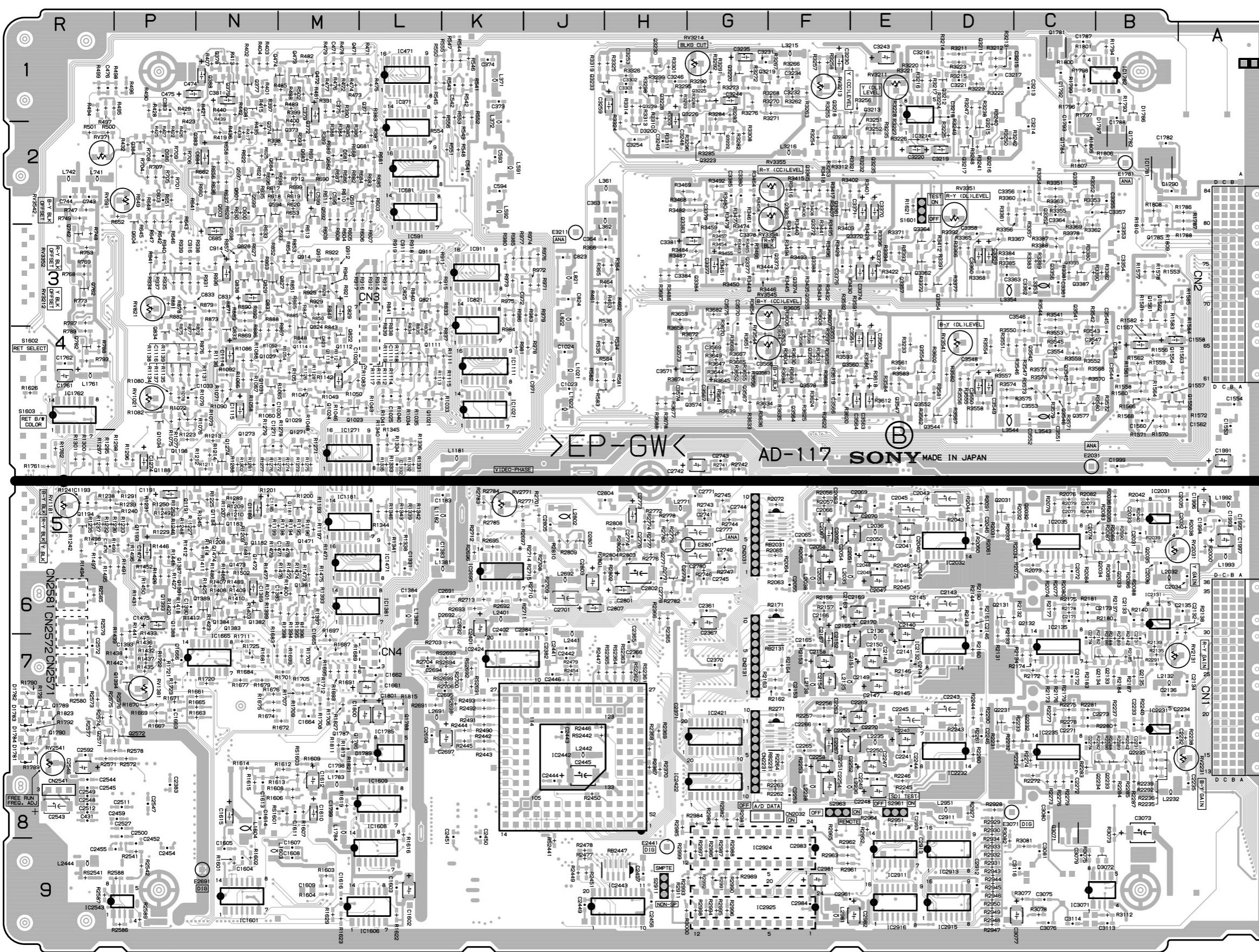
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B-YBKP7311-AD117-11

Section 7
Board Layout

AD-117 BOARD





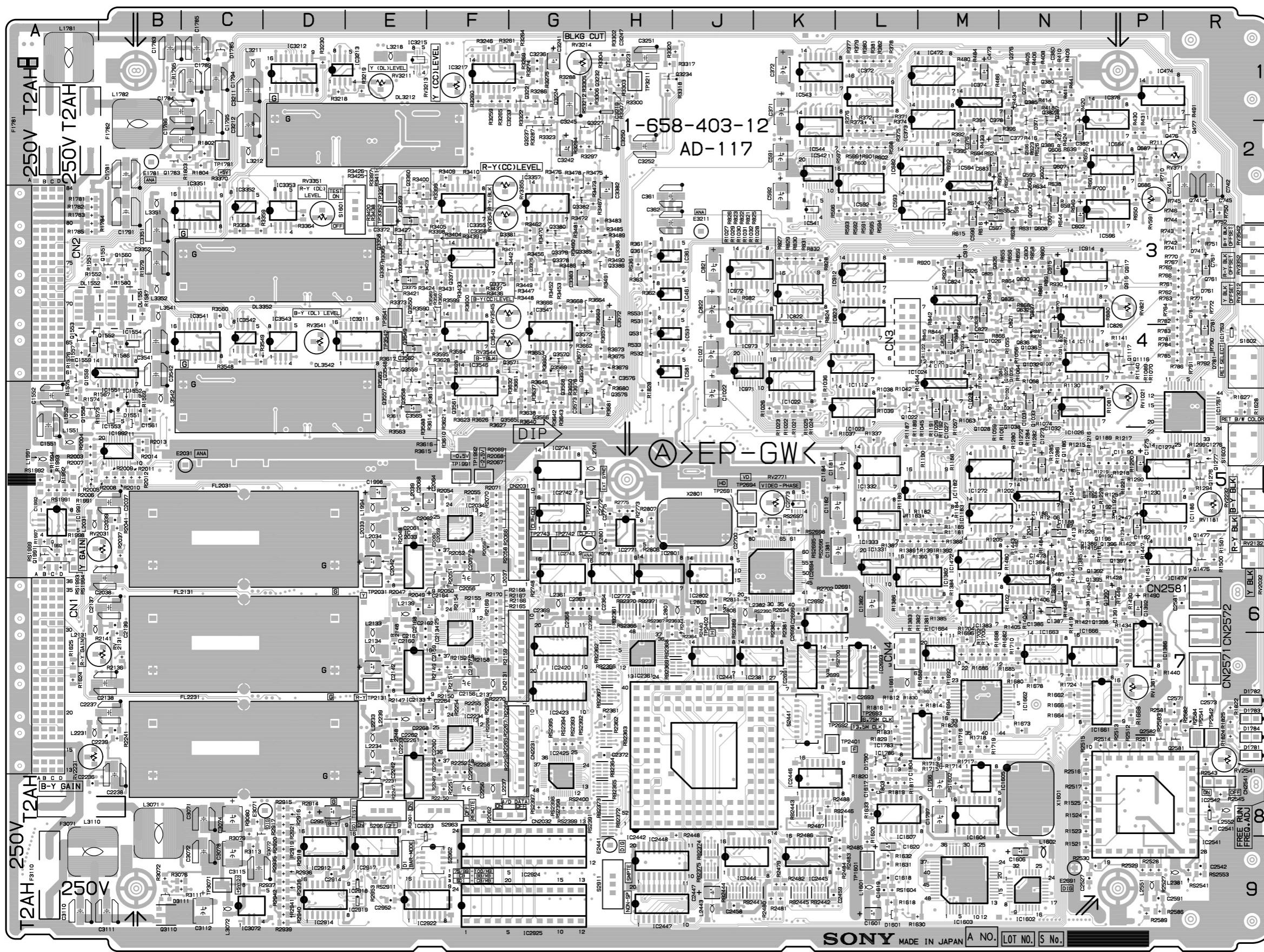
AD-117 - B SIDE -
1-658-403-13

AD-117(1-658-403-13)

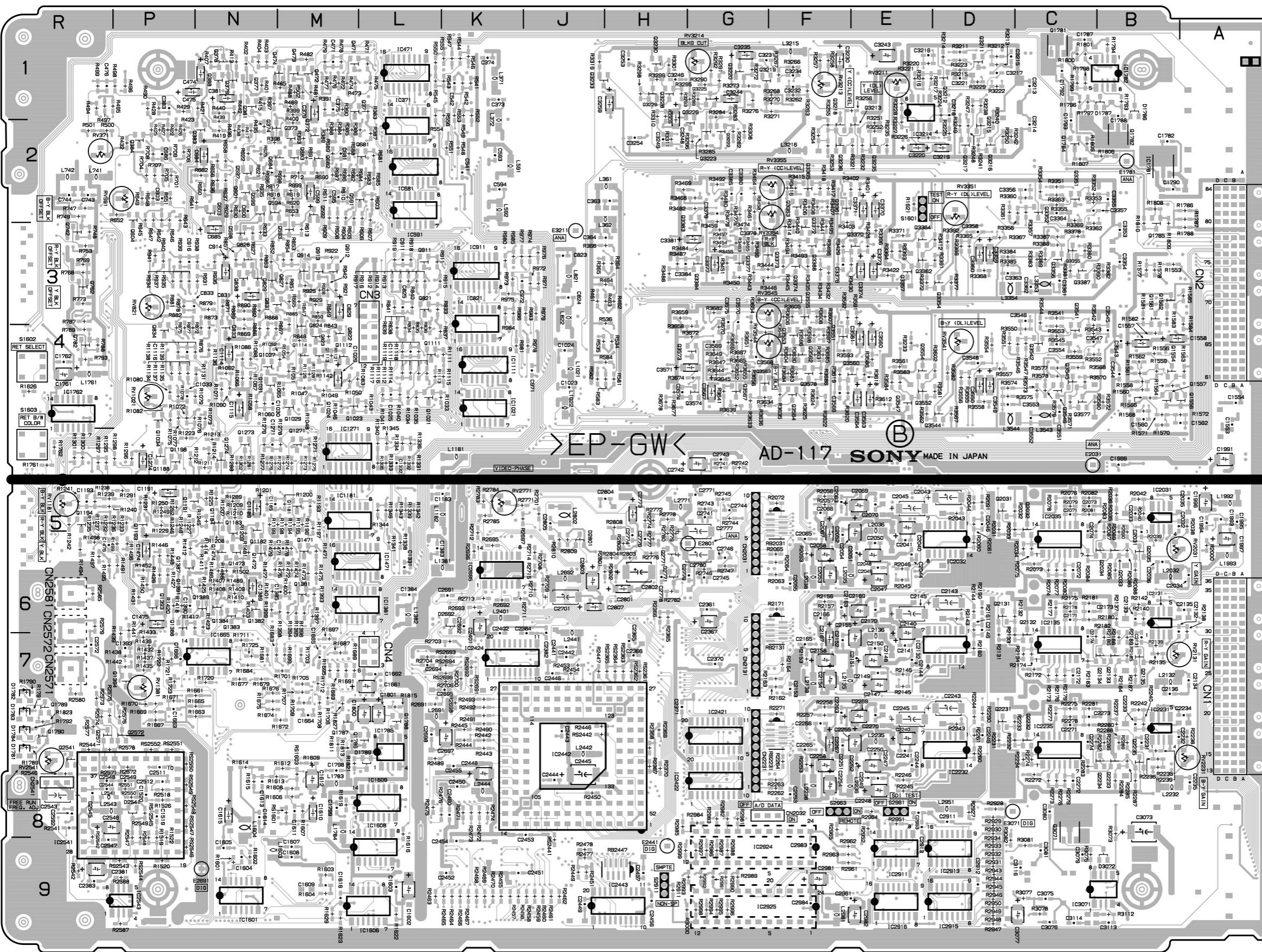
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C362	H3	C1187	N6	C1803	L8	C2169	*E6	C2527	*P8	C3232	*F1	CN2231	G8	IC1022	K4	IC2742	G5	L2231	A7	Q686	P2	Q1394	*P7	Q3362	*E3	R395	M2	R549	*K1	R691	*M2	R857	*N3
C363	*H2	C1188	N5	C1804	L8	C2170	*E6	C2541	R9	C3233	G1	CN2541	R8	IC1023	L4	IC2743	G6	L2232	*B8	Q687	P2	Q1395	P6	Q3363	*F2	R396	M2	R550	*L1	R692	M2	R858	N3
C364	*H3	C1189	*N5	C1991	*A5	C2171	*C6	C2542	P9	C3234	*F1	CN2571	R7	IC1024	M4	IC2771	H5	L2233	E8	Q741	R2	Q1396	P6	Q3364	*E3	R397	*N1	R551	*K2	R694	M2	R859	N3
C371	K1	C1190	P5	C1992	A5	C2172	*C7	C2543	*R8	C3235	*G1	CN2572	R6	IC1026	N4	IC2772	H6	L2234	E8	Q742	*R3	Q1397	P6	Q3365	*F2	R398	*N2	R552	*K1	R695	N2	R860	N3
C372	K1	C1191	*P5	C1993	*A5	C2173	*C6	C2544	*R8	C3236	G1	CN2581	R6	IC1111	*K4	IC2773	K5	L2235	*E8	Q761	R3	Q1398	P6	Q3367	E3	R399	*M1	R553	*K1	R696	*N2	R861	N3
C373	*K1	C1192	P5	C1994	*A5	C2174	*C7	C2545	*R8	C3241	G1	D371	N2	IC1114	N4	IC2802	J6	L2236	*F8	Q762	*R3	Q1471	*M6	Q3368	E3	R400	*M2	R554	*L1	R698	*M2	R863	*N3
C374	*K1	C1193	*R5	C1995	*A5	C2231	*B8	C2546	*R8	C3242	G2	D371	N2	IC1181	*M6	IC2911	*E9	L2237	F8	Q781	R4	Q1472	*N6	Q3369	E3	R401	*N1	R555	*K1	R699	*M2	R864	N3
C375	*M1	C1271	*N5	C1996	*A5	C2232	*B8	C2547	*P8	C3243	*E1	D591	N2	IC1271	*M5	IC2916	*E9	L2238	*F8	Q782	*R4	Q1473	*N6	Q3370	*E3	R402	*N1	R556	*K1	R700	P2	R865	*M3
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C377	N2	C1274	*P5	C1998	E5	C2234	*A7	C2549	*R8	C3245	G1	D761	R3	IC1183	M5	IC2913	*E9	L2361	G6	Q822	*M4	Q1476	R6	Q3372	*F3	R404	*N1	R582	*J4	R704	*P2	R867	*N4
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C381	*N1	C1332	L5	C2033	*B5	C2238	B8	C2581	R6	C3249	*H2	D1181	P5	IC1272	M5	IC2917	E9	L2441	J7	Q826	M3	Q1553	A4	Q3376	G3	R408	N1	R592	L2	R708	*P2	R871	*N3
C382	N2	C1381	L6	C2034	*A6	C2239	B7	C2591	R9	C3250	H2	D1381	P6	IC1274	P5	IC2918	E9	L2442	J8	Q827	*N3	Q1554	*B4	Q3377	*G3	R409	N1	R593	L2	R709	*P2	R872	*P4
C383	*P1	C1382	L6	C2035	*A5	C2240	*E8	C2592	*R8	C3251	H1	D1551	B4	IC1331	L6	IC2919	E9	L2444	*R9	Q828	*N3	Q1556	*A4	Q3378	G3	R410	N1	R594	L2	R710	P2	R873	*N4
C431	*R8	C1383	*L6	C2036	*B6	C2241	*E8	C2691	*K6	C3252	H2	D1601	L9	IC1332	L5	IC2922	E9	L2543	R8	Q829	*N3	Q1557	*B4	Q3379	G3	R411	N1	R595	L2	R711	P2	R874	N4
C471	*M1	C1384	*L6	C2037	B5	C2242	E8	C2692	*K6	C3253	*H1	D1781	R8	IC1333	L6	IC2923	F9	L2551	P9	Q830	N3	Q1558	A4	Q3380	G3	R413	*N1	R596	L2	R712	*M2	R875	*P4
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C474	*N1	C1386	N6	C2039	B5	C2244	*E8	C2694	*L7	C3259	*H1	D1783	R7	IC1382	L6	IC2925	F9	L2692	*J6	Q832	N3	Q1560	B3	Q3382	G2	R415	*N1	R598	L2	R742	R3	R877	*P4
C475	*P1	C1387	N6	C2040	*E5	C2245	*E7	C2695	*K7	C3300	H1	D1784	R8	IC1383	M6	IC3071	*C9	L2741	H5	Q833	*N4	Q1561	*B3	Q3383	*G3	R416	N2	R599	L2	R743	R3	R878	*P3
C476	*R1	C1388	N6	C2041	*E6	C2246	*D8	C2696	K6	C3301	*H1	D1785	C1	IC1384	N6	IC3072	C9	L2771	*H5	Q834	*P4	Q1562	*B3	Q3384	*G3	R417	*N2	R600	L2	R744	R2	R879	*N3
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R1035	*L4	R1189	L5	R1333	*L5	R1479	*N6	R1663	*P7	R1809	*B3	R2083	*C6	R2255	F7	R2572	*P8	R2936	D9	R3255	*F2	R3381	*C3	R3477	*G2	R3621	F4	RS1603	*M8	TP2694	J5																														
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R1045	M4	R1199	*N5	R1343	*L5	R1491	*P6	R1673	N7	R1820	L8	R2132	*D6	R2265	F8	R2582	R7	R2946	*D9	R3265	F1	R3392	*D3	R3487	*H3	R3631	*F4	RS2364	*H7	X1601	N8																														
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R1047	*M4	R1201	*N5	R1345	*L5	R1495	*R6	R1675	*N7	R1822	R7	R2134	*C7	R2267	F7	R2584	R7	R2948	*D9	R3267	*F1	R3394	*E3	R3489	H3	R3633	*G4	RS2366	H6	R1048	*M4	R1202	N5	R1346	*L5	R1496	*P6	R1676	*N7	R1823	*R7	R2135	*B7	R2268	F7	R2585	*R6	R2949	*D9	R3268	*F1	R3395	*E3	R3490	H3	R3640	G4	RS2367	H6	TP3541	E3
R1049	*M4	R1203	*N6	R1381	M6	R1497	*R6	R1677	*N7	R1824	R8	R2136	B7	R2269	F7	R2586	*P9	R2950	*D9	R3269	G1	R3396	*E3	R3491	H3	R3635	*F4	RS2389	J6	*:B SIDE																															
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R1052	*M4	R1206	N5	R1384	M6	R1500	R6	R1680	N7	R1827	*M7	R2139	*B7	R2272	*C8	R2589	*P9	R2953	E9	R3272	*G1	R3399	E2	R3494	*F3	R3638	G4	RS2392	G8	R1053	M4	R1207	*N5	R1385	M6	R1501	R6	R1681	*N7	R1828	H4	R2140	*B6	R2273	*C8	R2691	L7	R2961	*F9	R3273	*G1	R3400	E2	R3495	*F3	R3639	*G4	RS2393	G8		
R1054	*M4	R1208	*N6	R1386	L6	R1502	*N6	R1682	N7	R1829	L8	R2141	B7	R2274	*C8	R2692	K6	R2962	*F9	R3274	G1	R3401	*E2	R3496	*F3	R3640	G4	RS2394	G8	R1055	N4	R1209	*N5	R1387	L6	R1519	P9	R1683	*N7	R1830	L7	R2142	*B7	R2275	*C7	R2693	K6	R2963	*F9	R3275	G1	R3402	*F2	R3541	*C3	R3641	*G4	RS2395	G8		
R1056	N4	R1210	*N5	R1388	M6	R1520	P9	R1684	*N7	R1831	L7	R2143	*D6	R2276	*C8	R2694	K6	R2964	*E8	R3276	*G1	R3403	*F3	R3542	*C4	R3642	G4	RS2396	G8	R1057	M4	R1211	*N5	R1389	L6	R1521	P9	R1685	N7	R1891	A5	R2144	*D6	R2277	*C7	R2695	K6	R2965	*F8	R3277	G2	R3404	F3	R3543	*C4	R3643	G4	RS2397	G8		
R1058	*N4	R1212	*P5	R1390	M6	R1522	P8	R1686	M7	R1892	A5	R2145	*E7	R2278	*C7	R2696	K6	R2961	*G8	R3283	*G1	R3405	F2	R3544	*C3	R3644	*G4	RS2398	G8	R1059	M4	R1213	*N5	R1391	M6	R1523	P8	R1687	*M7	R1893	A5	R2146	*E7	R2279	*C8	R2697	K5	R2962	*F9	R3284	*G1	R3406	*F2	R3545	*C4	R3645	*G4	RS2399	G8		
R1060	*N4	R1214	*N5	R1392	M6	R1524	P8	R1688	M7	R1894	A5	R2147	E7	R2280	*C7	R2698	K7	R2963	*G8	R3285	*G2	R3407	*F2	R3546	*C4	R3646	G4	RS2400	G8	R1061	N4	R1215	P5	R1393	*M6	R1525	P8	R1689	*M7	R1897	A6	R2148	E7	R2281	*C7	R2699	K7	R2964	*G8	R3286	G1	R3408	*F2	R3547	*C4	R3647	*G4	RS2441	J9		
R1063	M4	R1216	P5	R1394	*M6	R1526	P8	R1690	M7	R1898	A6	R2149	F7	R2282	*C8	R2694	K6	R2965	*F8	R3287	G1	R3409	F2	R3548	C4	R3648	*G4	RS2442	*J7	R1064	N4	R1217	P5	R1395	*M6	R1551	A3	R1691	*M7	R2000	*A																				

AD-117 BOARD



AD-117 - A SIDE -
1-658-403-12

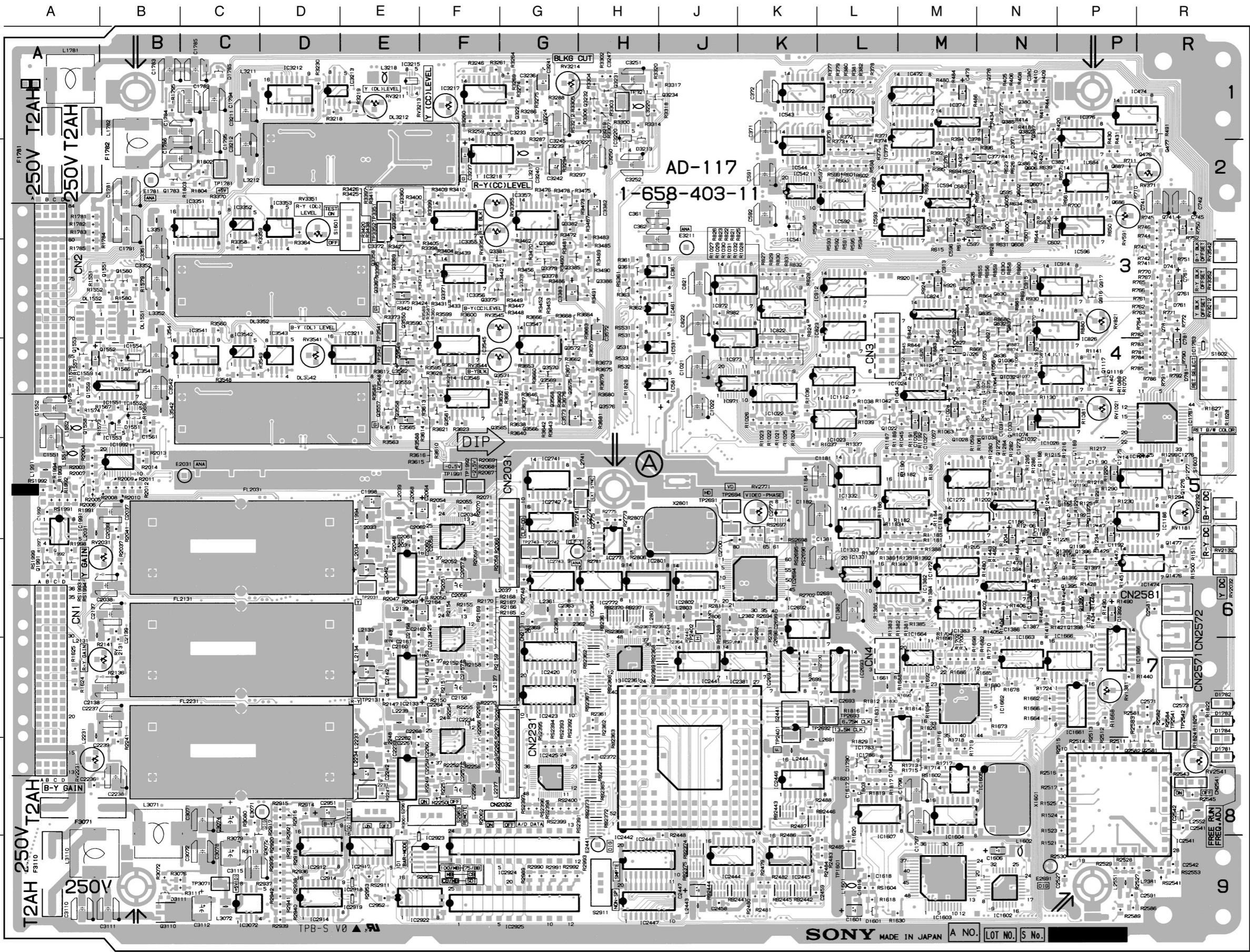
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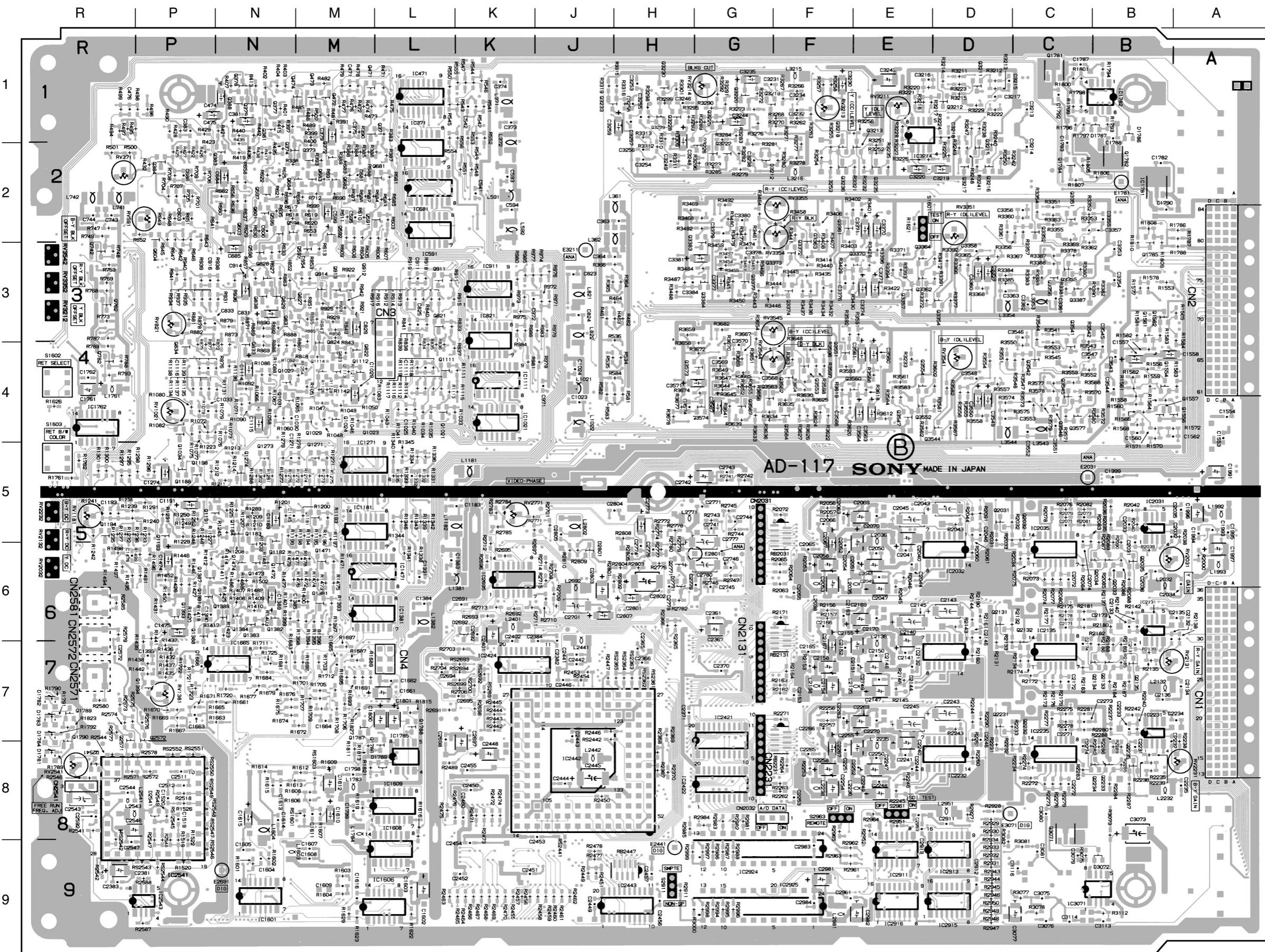
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C362	H3	C1188	N5	C1804	L8	C2170	*E6	C2544	*R8	C3236	G1	D591	N2	IC1181	*M6	IC2801	H6	L2237	F8	Q761	R3	Q1398	P6	Q3365	*F2	R398	*N2	R552	*K1	R695	N2	R860	N3
C363	*H2	C1189	*N5	C1991	*A5	C2171	*C6	C2545	*R8	C3241	G1	D741	R3	IC1182	L5	IC2802	J6	L2238	*F8	Q762	*R3	Q1471	*M6	Q3367	E3	R399	*M1	R553	*K1	R696	*N2	R861	N3
C364	*H3	C1190	P5	C1992	A5	C2172	*C7	C2546	*R8	C3242	G2	D761	R3	IC1183	M5	IC2911	*E9	L2239	E7	Q781	R4	Q1472	*N6	Q3368	E3	R400	*M2	R554	*L1	R698	*M2	R863	*N3
C371	K1	C1191	*P5	C1993	*A5	C2173	*C6	C2547	*R9	C3243	*E1	D781	R4	IC1184	N5	IC2912	D9	L2361	G6	Q782	*R4	Q1473	*N6	Q3369	E3	R401	*N1	R555	*K1	R699	*M2	R864	N3
C372	K1	C1192	P5	C1994	*A5	C2174	*C7	C2548	*R8	C3244	*G1	D821	N3	IC1186	P5	IC2913	*E9	L2381	R9	Q821	*L3	Q1474	*N6	Q3370	*E3	R402	*N1	R556	*K1	R700	P2	R865	*M3
C373	*K1	C1193	*R5	C1995	*A5	C2231	*B8	C2549	*P8	C3245	G1	D1021	N4	IC1271	*M5	IC2914	D9	L2382	J6	Q822	*M4	Q1476	R6	Q3371	F3	R403	*N1	R558	*H4	R701	*P2	R866	N4
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C376	M2	C1274	*P5	C1998	E5	C2234	*A7	C2573	R7	C3248	*H1	D1551	B4	IC1331	L6	IC2917	E9	L2442	*J8	Q825	M3	Q1552	B4	Q3374	*F3	R406	N1	R584	*H4	R706	*P2	R869	N4
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C378	N1	C1276	R5	C2031	*B6	C2236	A8	C2591	P9	C3250	H2	D1781	R8	IC1333	L6	IC2919	E9	L2444	*K8	Q827	*N3	Q1554	*B4	Q3376	G3	R408	N1	R592	L2	R708	*P2	R871	*N3
C379	*M1	C1331	*L6	C2032	*B5	C2237	B7	C2592	*R8	C3251	H1	D1782	R7	IC1381	*M6	IC2922	E9	L2541	*R8	Q828	*N3	Q1556	*A4	Q3377	*G3	R409	N1	R593	L2	R709	*P2	R872	*P4
C380	N1	C1332	*L5	C2033	*B5	C2238	B8	C2691	*K6	C3252	H2	D1783	R7	IC1382	L6	IC2923	F9	L2543	*R8	Q829	*N3	Q1557	*B4	Q3378	G3	R410	N1	R594	L2	R710	P2	R873	N4
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C382	N2	C1382	L6	C2035	*A5	C2240	*E8	C2693	L7	C3254	*H2	D1785	C1	IC1384	N6	IC2925	F9	L2552	R8	Q831	*N3	Q1559	A4	Q3380	G3	R413	*N1	R596	L2	R712	*M2	R875	*P4
C383	*P1	C1383	*L6	C2036	*B6	C2241	*E8	C2694	*L7	C3259	*H1	D1786	*B1	IC1386	P6	IC3071	*C9	L2691	*L7	Q832	N3	Q1560	B3	Q3381	F3	R414	N1	R597	L2	R741	R3	R876	*N4
C471	*M1	C1384	*L6	C2037	B5	C2242	E8	C2695	*K7	C3351	B3	D1787	*B1	IC1471	*M6	IC3072	C9	L2692	*J6	Q833	*N4	Q1561	*B3	Q3382	G2	R415	*N1	R598	L2	R742	R3	R877	*P4
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C474	*N1	C1386	N6	C2039	B5	C2244	*E8	C2697	*K8	C3353	*B3	D1790	L8	IC1474	P6	IC3212	D1	L2771	*H5	Q835	M3	Q1781	*C1	Q3384	*G3	R417	*N2	R600	L2	R744	R2	R879	N3
C475	*P1	C1387	N6	C2040	*E5	C2245	*E7	C2698	L7	C3354	*B3	D2541	*P8	IC1551	B4	IC3213	D1	L2801	J6	Q836	N4	Q1782	*B2	Q3385	G3	R418	N1	R601	L2	R745	R2	R880	P3
C476	*R1	C1388	N6	C2041	*E6	C2246	D8	C2699	K6	C3355	*B2	D2691	L6	IC1552	B4	IC3214	*E2	L2802	*J5	Q837	N3	Q1783	B2	Q3386	H3	R419	*N2	R602	L2	R746	R2	R881	*P3
C541	*K2	C1389	*N6	C2042	E6	C2247	*E8	C2700	K6	C3356	*C2	D2692	*K6	IC1553	B4	IC3215	E1	L2803	J6	Q838	*N3	Q1784	*C2	Q3387	*C3	R420	N1	R603	*L2	R747	*R2	R882	*P3
C542	*K1	C1390	*P6	C2043	*D5	C2248	E8	C2701	*J6	C3357	*C2	D2771	*H6	IC1554	B4	IC3217	F1	L2951	*D8	Q911	*L3	Q1785	B3	Q3388	*F3	R421	*N1	R604	*R3	R748	*R3	R883	M3
C591	K2	C1391	P6	C2044	*E6	C2249	E8	C2741	*G5	C3358	*D3	D2801	*J6	IC1601	*N9	IC3219	H1	L2981	*F9	Q912	*M3	Q1786	*L8	Q3541	*C4	R422	*P2	R605	*M2	R749	*R2	R884	M3
C592	K2	C1392	P6	C2045	*E5	C2250	*E8	C2742	*G5	C3359	*D3	D3072	*B9	IC1602	N9	IC3251	B3	L3071	B8	Q913	*M3	Q1787	*M7	Q3542	*C4	R423	*P2	R606	*L2	R750	R2	R885	*M4
C593	*K2	C1393	*P7	C2046	*D5	C2251	*F8	C2743	*G5	C3360	*D3	D3111	B9	IC1603	M9	IC3252	C2	L3072	C9	Q914	*M3	Q1788	*L7	Q3544	*D4	R424	N2	R607	*L2	R751			

R1037	K5	R1191	M5	R1335	*L5	R1481	*N6	R1665	*P7	R1811	*M8	R2085	*B6	R2257	*F7	R2488	K8	R2785	*K5	R3217	*E1	R3355	*C2	R3455	*G3	R3597	*F4	RB2362	H7	RV2771	K5
R1038	L4	R1192	M5	R1336	*L5	R1482	N6	R1666	N7	R1812	L7	R2086	*B6	R2258	F8	R2489	*L8	R2801	*J6	R3218	D1	R3356	*C2	R3456	G3	R3598	*F4	RB2363	H8	RV3211	E1
R1039	L4	R1193	*M5	R1337	L5	R1484	N6	R1667	*P7	R1813	*M8	R2087	*B6	R2259	F8	R2490	*K7	R2802	*H6	R3219	E1	R3357	*C2	R3457	*G3	R3599	F3	RB2364	H8	RV3212	R3
R1040	*L4	R1194	*M5	R1338	*L6	R1485	N6	R1668	P7	R1814	M7	R2088	*B6	R2260	*D8	R2491	*K7	R2803	*H6	R3220	*E1	R3358	C3	R3458	*G2	R3600	F3	RB2365	H8	RV3213	F1
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R1042	L4	R1196	*M5	R1340	*L5	R1488	*N6	R1670	*P7	R1816	L7	R2090	*B6	R2262	*F8	R2493	*K7	R2805	*H6	R3222	*D1	R3360	*C2	R3460	G3	R3602	*D4	RB2367	H7	RV3351	D2
R1043	*L4	R1197	*M5	R1341	*L6	R1489	*N6	R1671	*P7	R1817	L8	R2091	*D5	R2263	*F8	R2511	P8	R2806	H6	R3223	*D1	R3361	*D2	R3461	*G2	R3604	*F4	RB2368	J7	RV3352	R3
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R1051	*M4	R1205	N6	R1383	L6	R1499	*P6	R1679	*N7	R1826	M7	R2138	*A6	R2271	*F7	R2527	P9	R2915	D8	R3232	*E2	R3369	C2	R3469	*H2	R3613	E4	RB2441	K9	S1601	E2
R1052	*M4	R1206	N5	R1384	M6	R1500	R6	R1680	N7	R1827	*M7	R2139	*B7	R2272	*C8	R2528	P9	R2916	D8	R3233	*E4	R3370	C2	R3470	G3	R3614	F4	RB2442	K9	S1602	R4
R1053	M4	R1207	*N5	R1385	M6	R1501	R6	R1681	*N7	R1828	H4	R2140	*B6	R2273	*C8	R2529	P9	R2917	D8	R3235	*E2	R3371	*E3	R3471	G3	R3615	F4	RB2443	K8	S1603	R5
R1054	*M4	R1208	*N6	R1386	L6	R1502	*N6	R1682	N7	R1829	L8	R2141	B7	R2274	*C8	R2530	P9	R2918	D9	R3238	*D1	R3372	*E3	R3472	G2	R3616	F4	RB2444	J9	S2441	K7
R1055	N4	R1209	*N5	R1387	L6	R1519	*P9	R1683	*N7	R1830	L7	R2142	*B6	R2275	*C7	R2541	*R8	R2919	D9	R3240	*D2	R3373	E3	R3473	G2	R3617	E4	RB2445	K9	S2911	H9
R1056	N4	R1210	*N5	R1388	M6	R1520	*P9	R1684	*N7	R1831	L7	R2143	*D6	R2276	*C8	R2542	*R9	R2920	D9	R3241	*D2	R3377	*D3	R3474	*G3	R3618	*E4	RB2446	K8	S2961	E8
R1057	M4	R1211	*N5	R1389	L6	R1521	P9	R1685	N7	R1899	A5	R2144	*D6	R2277	*C7	R2543	R8	R2921	D8	R3242	*D2	R3378	C3	R3475	G2	R3619	*F4	RB2447	*H9	S2962	F9
R1058	*N4	R1212	*P5	R1390	M6	R1522	*P9	R1686	M7	R1992	A5	R2145	*E7	R2278	*C7	R2544	*R8	R2927	*D8	R3246	F1	R3380	C3	R3476	G2	R3620	*F4	S2963	F8		
R1059	M4	R1213	*N5	R1391	M6	R1523	P8	R1687	*M7	R1993	A5	R2146	*E7	R2279	*C8	R2545	R8	R2928	*D8	R3247	*D1	R3381	*C3	R3477	*G2	R3621	F4	RS361	H3		
R1060	*N4	R1214	*N5	R1392	M6	R1524	P8	R1688	M7	R1994	A5	R2147	E7	R2280	*C7	R2546	*R8	R2929	*D8	R3248	*D2	R3382	B3	R3478	G2	R3622	*F4	RS531	H3		
R1061	N4	R1215	P5	R1393	*M6	R1525	P8	R1689	*M7	R1997	A6	R2148	E7	R2281	*C7	R2547	*P9	R2930	*D8	R3249	*D2	R3383	C3	R3479	*G2	R3623	F4	RS1601	M8		
R1063	M4	R1216	P5	R1394	*M6	R1526	*P8	R1690	M7	R1998	A6	R2149	F7	R2282	*C8	R2548	*P9	R2931	*D9	R3250	*D2	R3384	*D3	R3480	*G2	R3624	*F4	RS1602	M8		
R1064	N4	R1217	P5	R1395	*M6	R1551	A3	R1691	*M7	R2000	*A6	R2150	F7	R2283	*C8	R2549	*P8	R2932	*D9	R3251	*E2	R3385	*D3	R3481	G3	R3625	*F4	RS1603	*M8		
R1065	*M4	R1218	P5	R1396	*M6	R1552	B3	R1692	M7	R2003	A5	R2151	F7	R2284	*B8	R2550	*P8	R2933	*D9	R3252	*E2	R3387	C3	R3482	*G2	R3626	F4	RS1604	L9		
R1066	*N4	R1219	P5	R1397	*M6	R1553	*B3	R1693	*M7	R2004	A5	R2152	F7	R2285	*B8	R2551	*P8	R2934	*D8	R3253	*F2	R3388	C3	R3483	H2</td						

AD-117 BOARD



AD-117 - A SIDE -
1-658-403-11



7-3 (a)

7-3 (a)

AD-117(1-658-403-11)

CN1	A8	IC971	J4	IC2741	G5	L2233	E8	Q741	R2	Q1396	P6	Q3364	*E3	RS2367	H6
CN2	A4	IC972	J3	IC2742	G5	L2234	E8	Q742	*R3	Q1397	P6	Q3367	E3	RS2390	K6
CN2032	G8	IC973	J4	IC2743	G6	L2235	*E8	Q761	R3	Q1398	P6	Q3368	E3	RS2397	G8
CN2541	R8	IC1021	*K4	IC2771	H5	L2236	*E8	Q762	*R3	Q1471	*M6	Q3369	E3	RS2399	G8
CN2571	R7	IC1022	K4	IC2772	H6	L2237	F8	Q781	R4	Q1472	*N6	Q3370	*E3	RS2441	*J9
CN2572	R6	IC1023	L4	IC2773	K5	L2238	*F8	Q782	*R4	Q1473	*N6	Q3371	F3	RS2542	*R9
CN2581	R6	IC1024	M4	IC2801	H6	L2239	E7	Q821	*L3	Q1474	*N6	Q3372	*F3	RS2691	*K7
		IC1026	N4	IC2802	J6	L2361	G6	Q822	*M4	Q1476	R6	Q3373	*G3	RS2693	*K7
DL1551	B3	IC1111	*K4	IC2911	*E9	L2381	R9	Q823	*M4	Q1477	R6	Q3374	*F3	RS2695	K5
DL1552	A3	IC1112	L4	IC2916	*E9	L2382	J6	Q824	*M4	Q1551	B3	Q3375	F3	RS2696	K5
DL3212	E2	IC1114	N4	IC2917	E9	L2401	*K6	Q825	M3	Q1552	B4	Q3376	G3	RS2697	K5
DL3352	D3	IC1181	*M6	IC2922	E9	L2441	*J7	Q826	M3	Q1553	A4	Q3377	*G3	RS2698	K6
DL3542	D4	IC1182	L5	IC2923	F9	L2442	*J8	Q827	*N3	Q1554	*B4	Q3378	G3	RS2699	*K7
		IC1183	M5	IC2924	F9	L2443	J9	Q828	*N3	Q1556	*A4	Q3379	G3	RS2700	K7
D371	N2	IC1184	N5	IC2925	F9	L2444	K8	Q829	*N3	Q1557	*B4	Q3380	G3	RS2911	E9
D591	N2	IC1186	P5	IC3071	*C9	L2541	*R8	Q830	N3	Q1558	A4	Q3381	F3	RS3212	H1
D741	R3	IC1271	*M5	IC3072	C9	L2543	*R8	Q831	*N3	Q1559	A4	Q3382	G2		
D761	R3	IC1272	M5	IC3211	D4	L2551	P9	Q832	N3	Q1560	B3	Q3383	*G3	RV2031	B6
D781	R4	IC1274	P5	IC3212	D1	L2552	R8	Q833	*N4	Q1561	*B3	Q3384	*G3	RV2032	R6
D821	N3	IC1331	L6	IC3213	D1	L2691	K8	Q834	*P4	Q1562	*B3	Q3385	G3	RV2131	B7
D1021	N4	IC1332	L5	IC3214	*E2	L2692	*J6	Q835	M3	Q1781	*C1	Q3386	H3	RV2132	R5
D1181	P5	IC1333	L6	IC3215	E1	L2741	H5	Q836	N4	Q1782	*B2	Q3387	*C3	RV2231	A8
D1381	P6	IC1381	*M6	IC3217	F1	L2771	*H5	Q837	N3	Q1783	B2	Q3541	*C4	RV2232	R5
D1551	B4	IC1382	L6	IC3218	F2	L2801	J6	Q838	*N3	Q1784	*C2	Q3542	*C4	RV2541	R8
D1601	L9	IC1383	M6	IC3219	H1	L2802	*J5	Q911	*L3	Q1785	*B3	Q3544	*D4	RV2771	K5
D1781	R8	IC1384	N6	IC3220	H1	L2803	J6	Q912	*M3	Q1786	*L8	Q3545	*C4	RV3211	E1
D1782	R7	IC1386	P6	IC3351	B3	L2951	*D8	Q913	*M3	Q1787	*M7	Q3546	*C4	RV3212	R3
D1783	R7	IC1471	*M6	IC3352	C2	L2981	*F9	Q914	*M3	Q1788	*L7	Q3547	*E4	RV3213	F1
D1784	R8	IC1472	M6	IC3353	D3	L3071	B8	Q916	P3	Q1789	*R7	Q3548	E4	RV3214	G1
D1785	C1	IC1474	P6	IC3355	F2	L3072	C9	Q917	P3	Q1790	*R8	Q3549	E4	RV3351	D2
D1786	*B1	IC1551	B4	IC3356	F3	L3110	A9	Q1021	*I4	Q1991	A6	Q3550	E3	RV3352	R3
D1787	*B1	IC1552	B4	IC3357	G2	L3211	C1	Q1022	L4	Q1992	A6	Q3551	*F4	RV3354	F2
D1789	*L8	IC1553	B4	IC3541	B4	L3212	C2	Q1023	*M4	Q2031	*D5	Q3552	*E4	RV3355	F2
D1790	L8	IC1554	B4	IC3542	C4	L3215	*F1	Q1024	*M4	Q2032	*C5	Q3553	*F4	RV3541	D4
D2541	*P8	IC1606	*M9	IC3543	D4	L3216	*F2	Q1025	M4	Q2033	*B6	Q3554	*E4	RV3542	R3
D2691	L6	IC1607	L8	IC3545	F4	L3217	G2	Q1026	M4	Q2034	*B6	Q3557	E4	RV3544	G4
D2692	*K6	IC1608	*L9	IC3546	F4	L3218	E1	Q1027	*N4	Q2035	*B6	Q3558	E4	RV3545	G3
D2771	*H6	IC1609	*L8	IC3547	G4	L3220	H1	Q1028	M4	Q2131	*D6	Q3559	E4		
D2801	*J6	IC1661	P7			L3351	B2	Q1029	*M4	Q2132	*C7	Q3560	*E4	S1601	E2
D3072	*B9	IC1662	M7	IS2442	J8	L3352	B3	Q1030	N4	Q2133	*B7	Q3561	F4	S1602	R4
D3111	B9	IC1663	N7	IS2541	P8	L3541	B3	Q1031	*N4	Q2134	*B7	Q3562	*F4	S1603	R5
D3212	*G2	IC1664	M7	IS2924	F9	L3542	B4	Q1032	N4	Q2135	*B7	Q3563	*G4	S2961	E8
D3213	H1	IC1665	*P7	IS2925	F9			Q1033	N4	Q2231	*D7	Q3564	*F4	S2962	F9
		IC1666	N7			Q361	H3	Q1034	*P4	Q2232	*C8	Q3565	G4	S2963	F8
E1781	B2	IC1761	R4	L361	*H2	Q371	*M1	Q1035	N4	Q2233	*B8	Q3566	G4		
E2031	C5	IC1762	*R5	L362	*H2	Q372	*M2	Q1036	N4	Q2234	*B8	Q3567	*G4	TP1601	L9
E2441	H9	IC1763	R4	L371	*K1	Q373	*M2	Q1037	N4	Q2235	*B8	Q3568	G4	TP1781	C2
E2691	N9	IC1781	*B2	L372	*K2	Q374	*N2	Q1038	N4	Q2541	*R8	Q3569	G4	TP1991	F5
E2801	H6	IC1782	*B1	L591	K2	Q375	N1	Q1111	*L4	Q2571	*R8	Q3570	G4	TP1992	F5
E3071	D8	IC1783	L7	L592	*K2	Q376	N1	Q1112	*M4	Q2572	*P8	Q3571	G4	TP2031	E6
E3211	J3	IC1785	*L8	L741	*R2	Q377	*N1	Q1113	*M4	Q2581	R8	Q3572	G4	TP2131	E7
FL2031	C6	IC1991	A5	L821	*J3	Q379	N1	Q1114	*M4	Q2582	P8	Q3573	*G4	TP2231	E8
FL2131	C7	IC1992	B5	L822	*J3	Q380	N1	Q1117	P4	Q3071	*C8	Q3575	H4	TP2402	J6
FL2231	C8	IC2031	*B5	L1021	*J4	Q381	*N1	Q1181	*M5	Q3072	C8	Q3576	H4	TP2542	R8
		IC2032	*D5	L1022	*J4	Q382	N2	Q1182	*N5	Q3110	B9	Q3577	*C4	TP2691	J5
F1781	A1	IC2033	E6	L1181	*K5	Q383	*N2	Q1183	*N6	Q3211	*D1	RB2031	*F5	TP2693	L7
F															

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